



**JSH international™**  
*From the Earth... for the Earth®*

# Nature's Wonder® APEX-10™

***AN ECONOMIC DRIVER &  
JOB CREATOR***

**Nature's  
Wonder®**



[www.NaturesWonder.com](http://www.NaturesWonder.com)

# ABOUT US

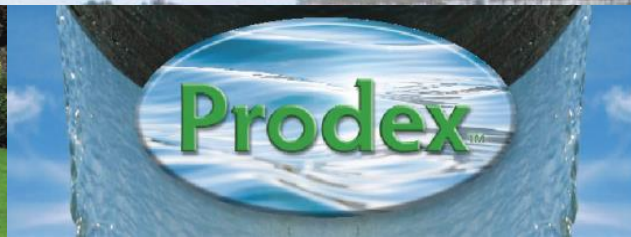
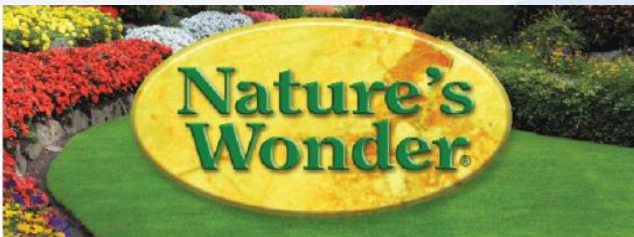


**JSH international**  
*From the Earth... for the Earth®*

- JSH international is a Bio-Environmental Company located in New Jersey, USA
- Affiliate of J.S. Hovnanian & Sons
- Company provides varied formulations of a proprietary organic liquid peat extract
- The product is 100% 'USA' raw materials, production & lab tested
- Nature's Wonder APEX-10 is backed by studies from the USA, Togo, Nigeria, Kenya, Ghana, Philippines, China, Japan & Armenia
- APEX-10 is currently at various stages of market penetration in 20 countries on Three continents and expanding

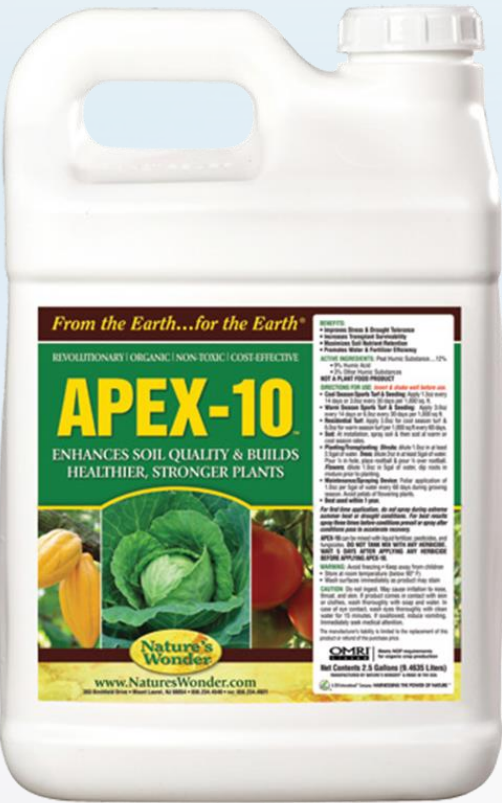
## OUR INTERNATIONAL MISSION

Become a leader in the effort to increase world food production and food security in an organic and sustainable way with APEX-10 as an economic driver that provides a way to a better life for millions of individuals. Also, to promote environmental stewardship, operational efficiency and a healthier work place while being cost effective.



# WHAT IS APEX-10?

The Ultimate Soil & Crop Health Technology



- **APEX-10™** is manufactured by JSH international
- A powerful **FERTILIZER BOOSTER** that is both a **BIO-STIMULANT & SOIL AMENDMENT**
- A one-of-a-kind **peat extract** made from 10,000 year old active and complex organic materials
- Our **proprietary extraction process and unique formulation** successfully captures a more complete spectrum of beneficial substances

**OMRI**  
Listed

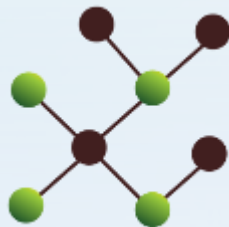


# PEAT HUMIC SUBSTANCE



Organic Liquid Bio-Stimulant

Derived from Peat which is designated as a renewable resource by the US Geological Group



Naturally occurring combinations of hydrogen & oxygen molecules and organic acids

Humic & Fulvic Acid



Developed using a patented process

Proprietary dispersion technology results in low dosage rates



University Tested & Proven through Real World Applications



*From the Earth...for the Earth®*

REVOLUTIONARY | ORGANIC | NON-TOXIC | COST-EFFECTIVE

# APEX-10™

**ENHANCES SOIL QUALITY & BUILDS HEALTHIER, STRONGER PLANTS**

BENEFITS

Enhances Fertilizer & Irrigation Efficiency | Improves Stress & Drought Tolerance  
Maximizes Soil Nutrient Retention | Increases Transplant Survivability



**Nature's  
Wonder**

**1.9 Liters**



**[www.NaturesWonder.com](http://www.NaturesWonder.com)**

MANUFACTURED BY NATURE'S WONDER & MADE IN THE USA

A Division of JSH international

## ACTIVE INGREDIENTS:

Peat Humic Substance.....Minimum 12%

## NOT A FERTILIZER

## DIRECTIONS FOR USE: *Invert & shake well before use.*

**Agriculture:** Divide the 1.9L bottle into two (2) sprays per acre. Mix with water in your desired container/knapsack (with average capacity size of 16L to 19L). Make sure to stir until all is dissolved.

•**SEEDING- Short Term Crops (25 to 75 days) First Spray:** .95L at planting/seeding, **Second Spray:** .95L 3 weeks after planting or once the seeds have broken ground. **Long Term Crops (75 days or more)**, same as above with an optional .95L 3-4 weeks prior to fruiting to reduce stress.

•**TRANSPLANTING- First Spray:** 120mL of the mixed solution onto the plants after transplanting, **Second Spray:** After 3 weeks, follow step one above by mixing the rest of solution in your container/knapsack and spray on the plants again.

•**TREE CROPS RESTORATIONS- Points to note before application, Dosage:** 120mL of APEX-10 to 16L or 19L of water in spray can, knapsack/mechanized sprayer. Depending on size/age most trees will have to be groomed & pruned before applying the solution. Trees or tree crops, depending on age, may need to be treated with fungicide/pesticide before application. These steps must be taken & performed if they have not been done within the past year. **Recommended:** Spray two or three times per season. **Step 1:** Mix 1.9L of APEX-10 with water into your container or knapsack (with capacity of 16L-19L) **Step 2:** Clear the shrubs or leaves & till the soil around the stems leading to the root of the tree **Step 3:** Add required amount of fertilizer and black soil if needed [Chicken, goat, cow manure or any choice of manure is allowed. Alternatively, you can also use any artificial fertilizer of choice] **Step 4:** Spray the tree from the roots thoroughly to the stems and few branches within your reach (do not spray leaves)

**Please note:** When using a machine blower: (for short term & midterm crops) blow for approx. 5-7 seconds, (for long term crops) blow for approx. 15-20 seconds. Mechanized spraying manually: (short term & midterm tree crops) not more than 10-15 seconds on each, (long term crops) not less than 15-20 seconds on each.

**You can & should spray APEX-10 on tree crops during he first month of treatment at least 3-4 times. After the treatment period, spray the tree crop at least 2 times in a month. Dosages: 120mL with 16L-19L water with a spray can (tank or manual knapsack/- mechanized sprayer).**

•**MAINTENANCE/SPRAYING DEVICE:** Foliar application of 30mL per 19L of water every 45-60 days during growing season. Avoid petals of flowering plants.

## BEST USED WITHIN 2 YEARS.

*For first time application, do not spray during extreme summer heat or drought conditions. For best results spray three times before conditions prevail or spray after conditions pass to accelerate recovery.*

APEX-10™ can be mixed with liquid fertilizer, pesticides, fungicides, and growth regulators.

**WARNING:** •Avoid freezing •Keep away from children •Store at room temperature (above 0°C and below 26°C) •Wash surfaces immediately as product may stain

**CAUTION:** Do not ingest. May cause irritation to nose, throat, and skin. If product comes in contact with skin or clothes, wash thoroughly with soap and water. In case of eye contact, wash eyes thoroughly with clean water for 15 minutes. If swallowed, induce vomiting and immediately seek medical attention.



The manufacturer's liability is limited to the replacement of this product or refund of the purchase price.

*From the Earth... for the Earth®*



## ENHANCES FERTILIZER & WATER EFFICIENCY

**How?** By increasing crop chlorophyll levels and accelerating crop metabolic performance

**The Bottom Line:**

- Increased Fertilizer Efficiency + Less Water = Cost Savings
- Less inputs are better for the environment

**Learn More:** [VT: Enhancing Crop Productivity During Drought Conditions](#), [Rutgers: Effects of A10 on Fertilizer Efficiency](#)

## INCREASES CROP TURGIDITY

**How?** By improving the crop's ability to move water more efficiently

**The Bottom Line:**

- Better Drought Tolerance
- Crop Remains Upright
- Cleaner Cut

**Learn More:** [Rutgers: Effect of A10 on Reducing Irrigation Requirements](#)

## DRAMATICALLY REDUCES POTENTIAL OF ROOT LOSS UNDER STRESSFUL CONDITIONS

**How?** By increasing root mass, density and strength

**The Bottom Line:**

- Maintain crop performance and root strength even during heat & traffic

**Learn More:** [VT: Enhancing Crop Productivity During Drought Conditions](#), [VT: Evaluating Root Development & Root Strength with A10 and Leonardite](#)

## ENHANCES SOIL NUTRIENT RETENTION & MAKES NUTRIENTS MORE AVAILABLE TO THE CROP

**How?** By enhancing the activity and growth of native microbial population, improves CEC

**The Bottom Line:**

- Solubilize nutrients that are tied up in the soil, increasing efficiency
- Greater crop growth & productivity

**Learn More:** [Soil Foodweb: Increasing Biomass & Nutrient Retention in Soil](#)

# VALUE PROPOSITION



It is predicted by the FAO (UN- Food & Agriculture Organization) that ***the world population will grow from 7.8B in 2020 to 9.8B by 2050***. The WRI (World Resources Institute) forecasts that ***currently there is more than a 500M- ha agricultural land gap globally*** to meet the 2050 food demand which calls for ***doubling food production in the next 30 years***.

## NATURE'S WONDER APEX-10:

- ✓ Produces higher sustainable yields needed for more cost effective food production on existing lands at an average dosage of only 1.9L/ac & 4.7L/ha
- ✓ Can be purchased in 1,041L totes and bottled in country to create jobs (or shipped in 1.9L bottles)
- ✓ Greatly improves the ROI for hard working farmers everywhere
- ✓ Provides a way to a better life for millions of people throughout the world
- ✓ Can have a huge impact on the economies of developing countries by increasing overall purchasing power of its citizens
- ✓ Allows farmers to diversify during multiple growing seasons improving the economic base
- ✓ Improves a nations food security and in turn protecting its citizens from food shortages and civil unrest

**APEX-10 is more than a product. It's an ECONOMIC DRIVER in the form of an agricultural PHENOME!**



# USA UNIVERSITY STUDIES



- Rutgers University
  - Effects of APEX-10™ on Fertilizer Efficiency
  - Effects of APEX-10™ on Reducing Irrigation Requirements
  - APEX-10™ on Performance Under Reduced Fertility & Irrigation Regimes
- Virginia Tech
  - Enhancing Crop Productivity During Drought Conditions
  - Evaluating Root Development & Root Strength with APEX-10™ and Leonardite
- Soil Foodweb
  - Increasing Biomass & Nutrient Retention in Soil



Find these studies at [NaturesWonder.com](http://NaturesWonder.com)  
under Research



# OMRI Listed®

The following product is OMRI Listed. It may be used in certified organic production or food processing and handling according to the USDA National Organic Program regulations.

## Product

APEX-10™

## Company

Nature's Wonder A Division of JSH International  
Kevin Mulvihill  
900 Birchfield Drive  
Mount Laurel NJ 08054 United States

## Status

Allowed

## Category

NOP: Humic Acids – alkali  
extracted

## Issue date

27-Feb-2002

## Product number

pro-9248

## Class

Crop Fertilizers and Soil  
Amendments

## Expiration date

1-Sep-2023

## Restrictions

Not applicable.

Executive Director/CEO

Product review is conducted according to the policies in the current OMRI Policy Manual® and based on the standards in the current OMRI Standards Manual®. To verify the current status of this or any OMRI Listed product, view the most current version of the OMRI Product List® at OMRI.org. OMRI listing is not equivalent to organic certification and is not a product endorsement. It cannot be construed as such. Final decisions on the acceptability of a product for use in a certified organic system are the responsibility of a USDA accredited certification agent. It is the operator's responsibility to properly use the product, including following any restrictions.



Organic Materials Review Institute  
P.O. Box 11558, Eugene, OR 97440-3758, USA  
541.343.7600 · info@omri.org · OMRI.org

# IN-FIELD RESULTS

*The Results Speak For Themselves!*



- Testing was completed in multiple countries under different soil and climate conditions
- Many tests done for comparison with & without APEX-10
- Various crops were used and all showed outstanding results
- Formal testing was completed on three continents to include- USA, Togo, Nigeria, Kenya, Ghana, Philippines, China, Japan & Armenia. APEX-10 was a great success!

[www.NaturesWonder.com](http://www.NaturesWonder.com)

# IN-FIELD RESULTS

Togo Institute of Agronomic Research (ITRA)



**ITRA, the prestigious research institution in Togo, conducted a ground breaking study aimed at testing the effectiveness of APEX-10 on the agronomic performance and yield of maize in Togo.**

- *The use of APEX-10 made it possible to reduce the dose of NPK mineral fertilizer by half to obtain the same yields as when the latter is applied in full dose.*
- The application of APEX-10 made it possible to increase grain maize yield by 36% compared to the control group without fertilization.
- From the results, It was concluded that both on vegetative growth parameters and on yield, APEX-10 can be recommended in cropping systems no matter what level of NPK is used.

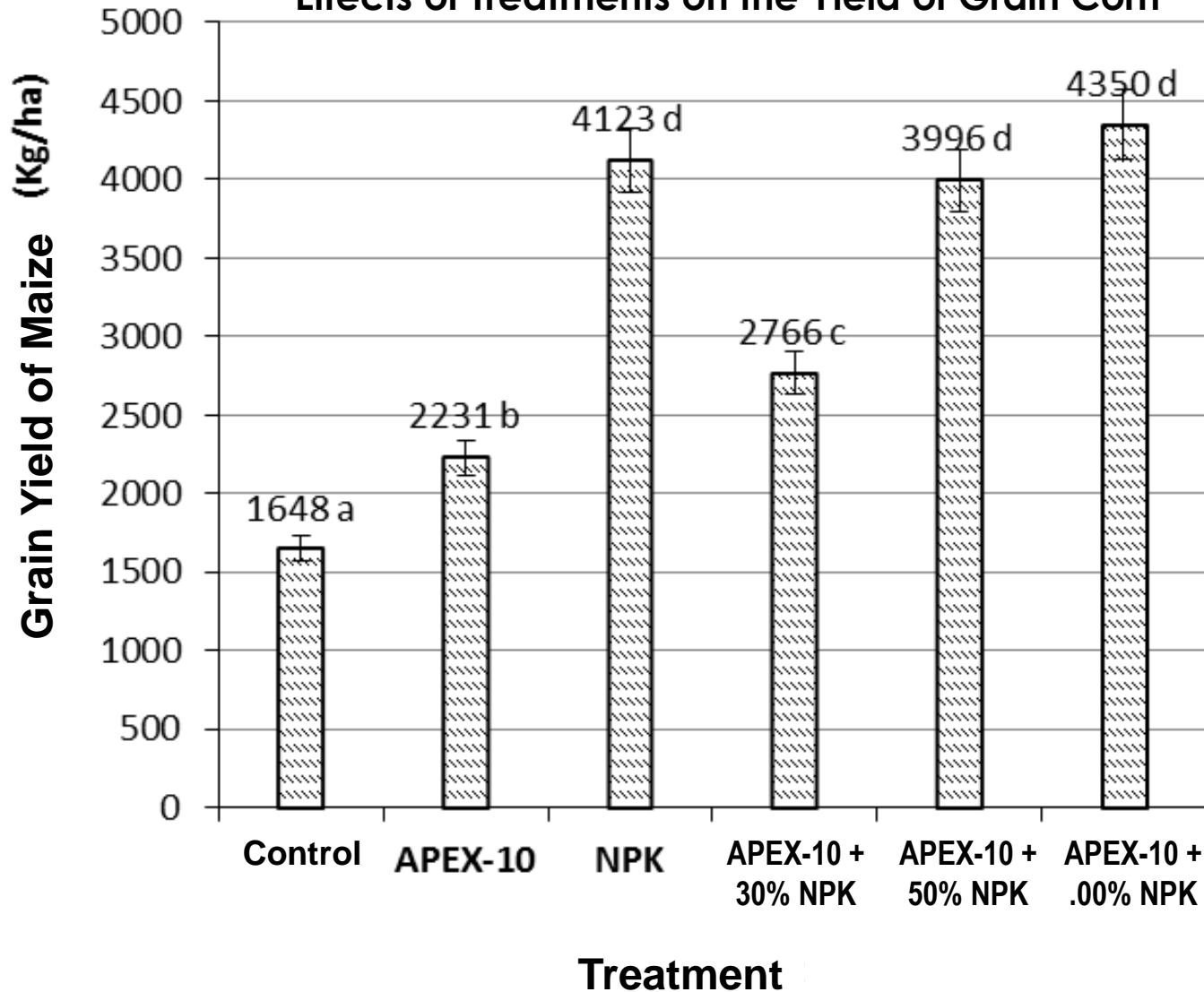


# IN-FIELD RESULTS

Togo Institute of Agronomic Research (ITRA)



Effects of Treatments on the Yield of Grain Corn



- APEX-10 with 50% fertilizer statistically has the same yield as 100% fertilizer only.
- It is concluded that the application of APEX-10 on the crops makes it possible to reduce the recommended doses of NPK mineral fertilizer and obtain the best yields- no matter what fertilizer amount is available to the farmer.



# IN-FIELD RESULTS

TechnoServe



**TechnoServe**, a leading global agriculture focused NGO, carried out field trials in **14 locations across Nigeria** starting in June 2019 to determine the **effects of APEX-10 on performance and yield** using tomatoes. Harvest was conducted between October & December 2019.

- Only **70% of the normal fertilizer** requirement was used in the treatment plots
- Based on outcomes from both the treatment and control plots, it is concluded that **APEX-10 contributed significantly to the increase in the development, performance and yield of tomatoes** (*See ROI Analysis on the next slide*)
- The treatment plots also exhibited **increased plant vigor as well as lesser incidences of disease attack**

# IN-FIELD RESULTS

TechnoServe



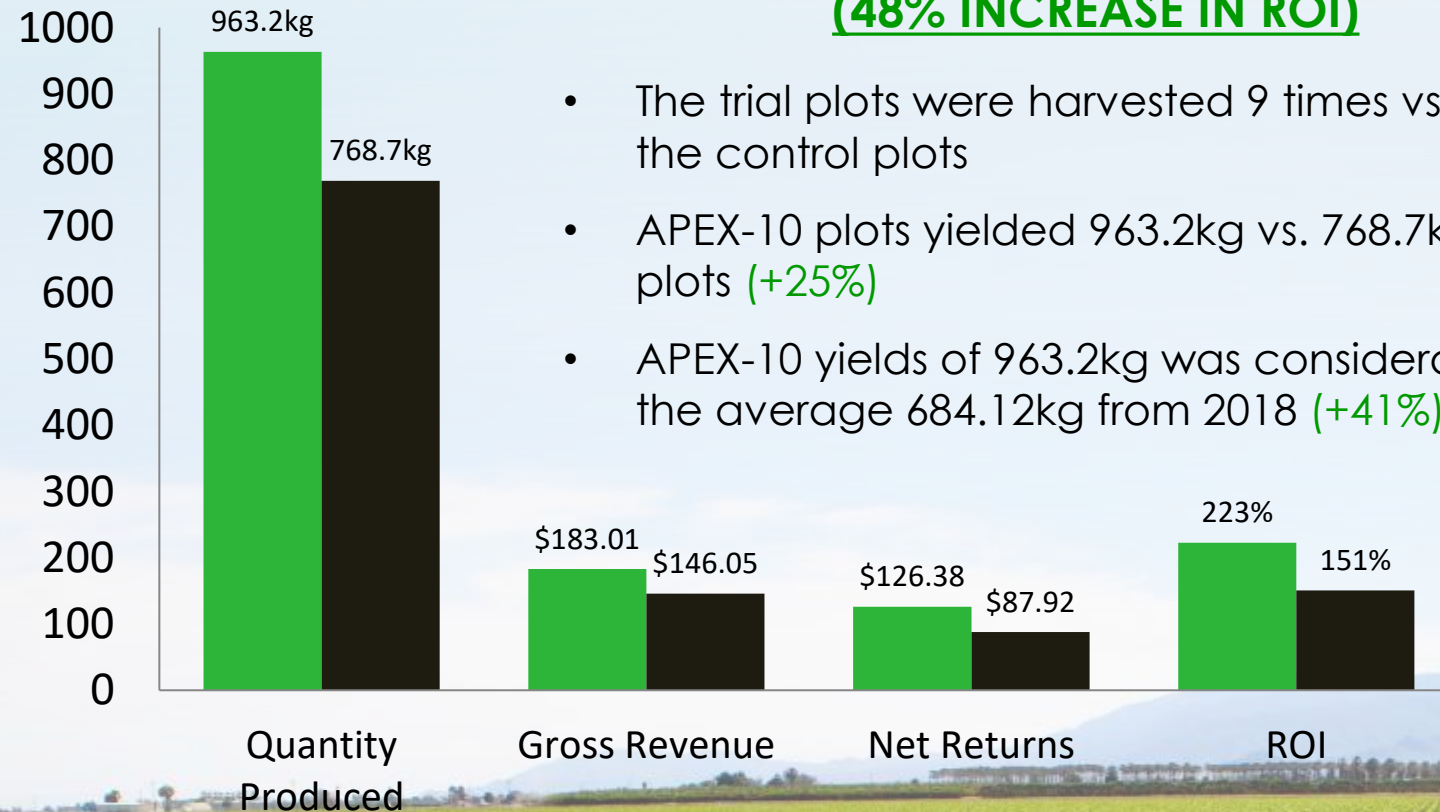
**TECHNOSERVE**  
BUSINESS SOLUTIONS TO POVERTY



**APEX-10 treatment plots had an ROI of \$223 USD for every \$100 US invested vs. an ROI of \$151 US for every \$100 USD invested for the control plots!!**

**(48% INCREASE IN ROI)**

- The trial plots were harvested 9 times vs. 8 harvests from the control plots
- APEX-10 plots yielded 963.2kg vs. 768.7kg from the control plots (+25%)
- APEX-10 yields of 963.2kg was considerably higher than the average 684.12kg from 2018 (+41%)



■ APEX-10 ■ Control

**TEST WITH MORE DETAILS IS AVAILABLE UPON REQUEST**

# IN-FIELD RESULTS

TechnoServe



**TECHNOSERVE**

BUSINESS SOLUTIONS TO POVERTY



**Treatment Plot**

**Control Plot**

**3 weeks**



**9 weeks**





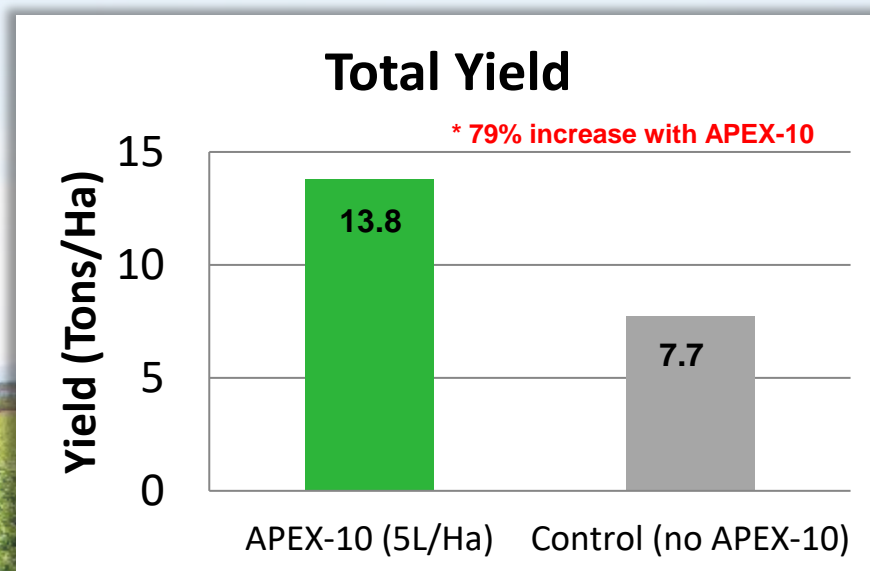
# IN-FIELD RESULTS

Kenya Agricultural Research Institute testing of French Beans



	APEX-10 HUMIC ACIDS	CONTROL
TREATMENT:	5.0L/ha+ 100% Standard practice	100% Standard practice without APEX-10
# OF HARVESTS:	6	5
YIELD PER HECTARE (KG):	13,789	7,726

**\* The difference between the APEX-10 yield and the control yield is an increase of 6,063 Kg**



# IN-FIELD RESULTS

Kenya tested & doubled the yield on rice. Japan (photos) achieved substantial root growth on pre-plant rice.



Rice seedlings at 3 weeks, with & without Nature's Wonder®

Excellent head-start on root development, & will also help with transplant stress & re-establishment



未散布の苗  
(種まき後4週間)

散布した苗  
(種まき後3週間)

NOTE: Kenyan National Irrigation Board tested APEX-10™ and doubled the yield on rice

# IN-FIELD RESULTS

Ghana testing on Cocoa



**“APEX-10 for cocoa and all crops HAS NO COMPETITION and it’s a PERFECT BLESSING to all farmers even beyond cocoa.”**

*- Mr. Charles Gyamfi*

*Named the Best African Cocoa farmer 2019  
Named the Best Ghana National farmer 2019*

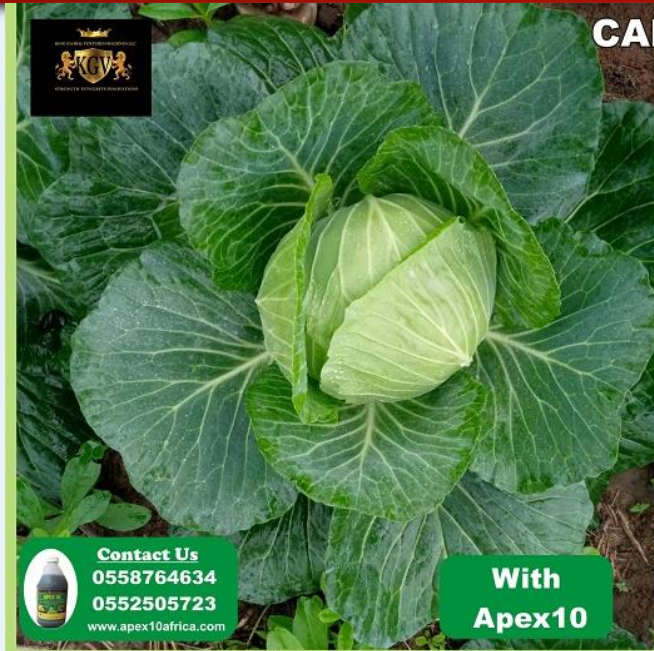


# IN-FIELD RESULTS

## Ghana testing on Cabbage & Tomatoes



“After being a researcher of crops, plants and soil for 30 years- I have yet to see any soil replenisher and/or any fertilizer booster for all crops & plants that comes close to the efficiency of APEX-10. It is truly a game changer.”



*- Dr. Gabriel Quansah: Ghana Crops, Plants and Soil Research Institute of Kumasi Ghana*



# IN-FIELD RESULTS

## Philippines testing on corn



**“The product showed high potential as soil conditioner and improved yield of grain corn when applied to the soil at planting and at 25 days after planting alone and in combination with recommended rates and half of the recommended rates of granular fertilizers. This combination could increase net income by 9% to 29%.”**



***- Dr. Gil Magsino  
Study Leader and FPA-Accredited Researcher  
Los Banos Philippines***



# IN-FIELD RESULTS

## China rice and tobacco testing



- Increased crop production on all crops tested
- Increased rice production by as much as 50%
- Enhanced fertilizer efficiency
- Enhanced the retention of water in soil
- Reduced the compaction of hardened clay soils
- Improved crop nutrient adsorption

### GROWING TOBACCO IN HUNAN, CHINA

Treated Tobacco



Untreated Tobacco



# IN-FIELD RESULTS

Japanese testing of Daikon radish



Daikon at 17 days with & without APEX-10™



**\* Greater size & yield  
with APEX-10™**



# IN-FIELD RESULTS

Japanese testing of potatoes



\* More robust crops & significantly greater yield with APEX-10™



Potato progress this year at the same farm

Greatly increased potato yields after 3 months





# IN-FIELD RESULTS

Armenia testing on wheat/corn/tomatoes/peppers

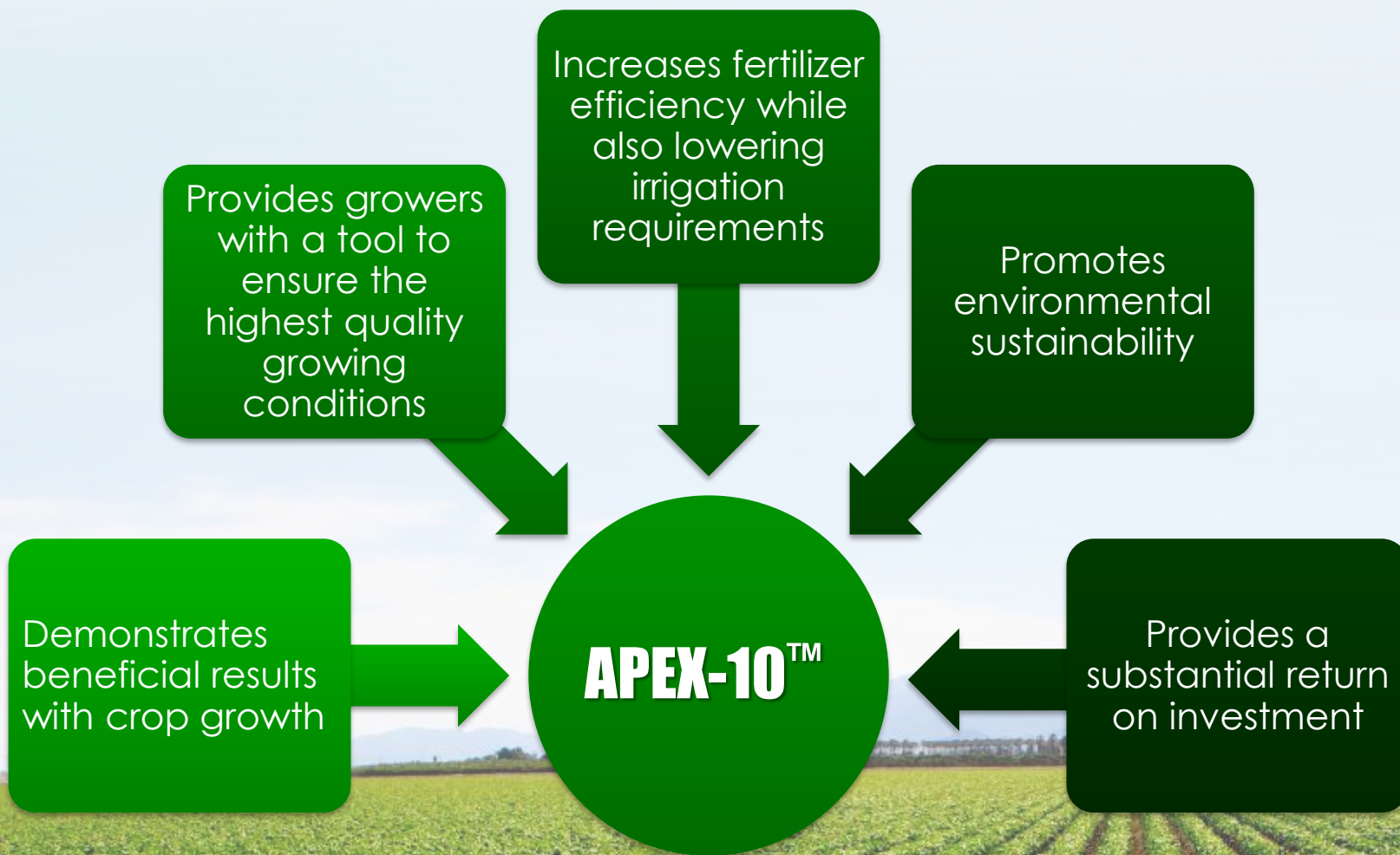


## ACADEMY OF AGRICULTURE ARMENIA *Study Conducted on Nutrient Deficient Soils*

- Increased wheat productivity 31% and wheat root growth by 9%
- Improved the total green net weight of corn by 49% and root weight by 16%
- Increased tomato productivity by 13%
- Increased green pepper productivity by 12%



# KEY BENEFITS





## CONTACT

[service@natureswonder.com](mailto:service@natureswonder.com)

[www.NaturesWonder.com](http://www.NaturesWonder.com)

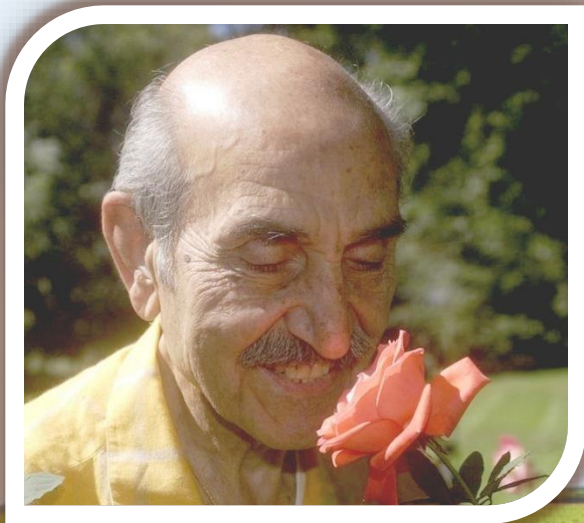




# THANK YOU!

*“I’ve had an incredible opportunity to lead a great life in America and to give back to the community from which I’ve received many rewards.”*

*~ Jirair Hovnanian, Founder*



Left: **Stephan Hovnanian (Principal)**  
Middle: **Kevin Mulvihill (CEO)**  
Right: **Peter Hovnanian (Principal)**