



LONTRA  
Keep It Pure

# Transforming Agriculture with Innovative

Mineral Solutions Providing Sustainable Growth & Ecological Balance



# AGRIBOOSTER

GEN21 MINERAL SOLUTION  
A COMPANY OF GEN21 GROUP



# What does “LONTRA” mean?

LONTRA is the Italian word for 'otter.' Otters can only live in pristine waters. Our mission is to gift humanity with clear water and an environment where even otters can thrive through our unique mineral extraction and stabilization technology.

## EXCLUSIVE TECHNOLOGY

- We possess the world’s leading mineral extraction and synthesis technology.
- Our proprietary method ensures that our products cannot be replicated, maintaining their exclusivity and effectiveness.
- Our natural mineral products enhance plant and animal growth and immunity without side effects, outperforming traditional fertilizers and pesticides.



# Problem in Agriculture



## Land Degradation

Reduced soil resilience, nutrient deficiency, loss of beneficial microorganisms, and decreased mineral content.

## Environmental Destruction

Overuse of chemical fertilizers leading to river pollution, ecosystem damage, and increased diseases.

## Quality and Safety

Reduction in crop flavor and sweetness, and high dependency on pesticides.

# Our Solution



## Enhancing Sustainability

Replacement of chemical fertilizers and pesticides, natural nutrient supply, and optimization of beneficial microbial environments


## Environmental Protection

Minimizing ecosystem damage through chemical-free crop management and reduction of harmful gases that cause odors in livestock facilities.





## How We Solve Agricultural Problems:

- Utilizing LONTRA's innovative mineral synthesis technology, we offer natural fertilizers, pesticides, and growth promoters that are safe for human consumption and provide powerful effects, stronger growth, and increased pest resistance.
  - Additionally, it enhances plant growth and pest resistance, while increasing the quality and yield of crops at competitive prices, thereby significantly boosting farmers' income.
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# AgriBooster

- A eco-friendly product made using patented mineral extraction and stabilization technology, consisting of three minerals and ionized water.
- It contains no harmful substances or chemicals, making it extremely safe for use on crops and livestock.

## Benefits:

Enhances crop sweetness, strengthens tissue for long-term storage, protects against diseases and pests, and increases the number of harvests

## Volume:

1 Gallon, 2.5 Gallon, 1.25ton (IBC bulk type)

It is in a concentrated form and needs to be diluted before use

## Usage Instructions:

Dilute 2,000 to 3,000 times for soil injection and 3,000 times for direct crop application.

Apply five times periodically for optimal results. Crop types may require different dilution concentrations and application frequencies





# Additional Benefits

Even with the most powerful herbicides, weeds often persist and regrow. When used with LONTRA Vitalizer, weeds are completely eradicated down to their roots, preventing regrowth and maximizing the herbicide's effectiveness.



## Benefits:

- **Effective with Any Herbicide:** Maximizes herbicide efficacy when mixed with LONTRA Vitalizer.
- **Deep Absorption:** Ensures deep root absorption for strong weed eradication.
- **Reduced Application Frequency:** Prevents weed regrowth, significantly reducing herbicide application frequency.
- **Safe and Natural:** Made with only natural minerals, safe for humans.
- **Nutrient Supply for Grass:** Provides essential nutrients for a healthy lawn.
- **Cost-Effective:** Much more cost-effective compared to using standard herbicides alone.

## Usage Instructions:

- **Mix 1:1 with Herbicide:** Apply a 1:1 mixture of LONTRA Vitalizer and any herbicide.
- **Compatible with All Brands:** Effective regardless of the herbicide brand used

“The perfect green lawn requires LONTRA Vitalizer”



# Certification & Test Results

The LONTRA brand is composed solely of natural minerals, providing essential nutrients to crops, increasing yield, and preventing pests and diseases. These results are derived from precise tests conducted by accredited institutions.



**Ingredient Analysis**  
Contains only three natural minerals



**Harmful Substance Testing**  
All 10 indicators of water pollution were undetectable



**ISO 9001**



**ISO 14001**

**Pesticide decomposition**

Korea Testing & Research Institute

Decomposes approximately 99% of the top 10 most frequently used pesticide residues.

**Cluster measurement**  
(water molecule size)

Korea Advanced Institute of Science and Technology

Smaller in size than ordinary water molecules, making absorption easier

**Self-quality inspection**

Seoul Health and Environment Research Institute

**LONTRA OH Radical Water (Type: 2 different Detergents)**  
For use in automatic dishwashers and industrial dishwashing.



# Results of Crop Usage

Experimental field	Chili pepper farming	Apple farming
Company name	Self-testing cultivation	Bonghwa farm Inc (KOREA)
Crop name	Chili pepper	Apple
Application frequency	T times / periodically	5 times / periodically
Application method	Direct spraying on soil and crops	Direct spraying on soil and crops
Result	<ul style="list-style-type: none"> <li>• <b>Twice the harvest yield with LONTRA products</b></li> <li>• <b>No pests and diseases</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Enhances the sour and sweet taste of fruit</b></li> <li>• <b>The tissue becomes stronger and the storage period becomes longer</b></li> <li>• <b>Flower buds grow thicker and faster</b></li> </ul>



Division	Sweetness			
	①Control group (not applied)	11.7	12.3	12.2
②Root irrigation 5 times	14.3	14.5	14.2	14.33
③Spray 3 times with mixed nutrients	13.5	13.0	13.8	13.43
④Spray 2.5 times once just before picking	13.6	13.2	12.9	13.23

# PoC Process and Outcome Cases for Chilli Pepper Farming

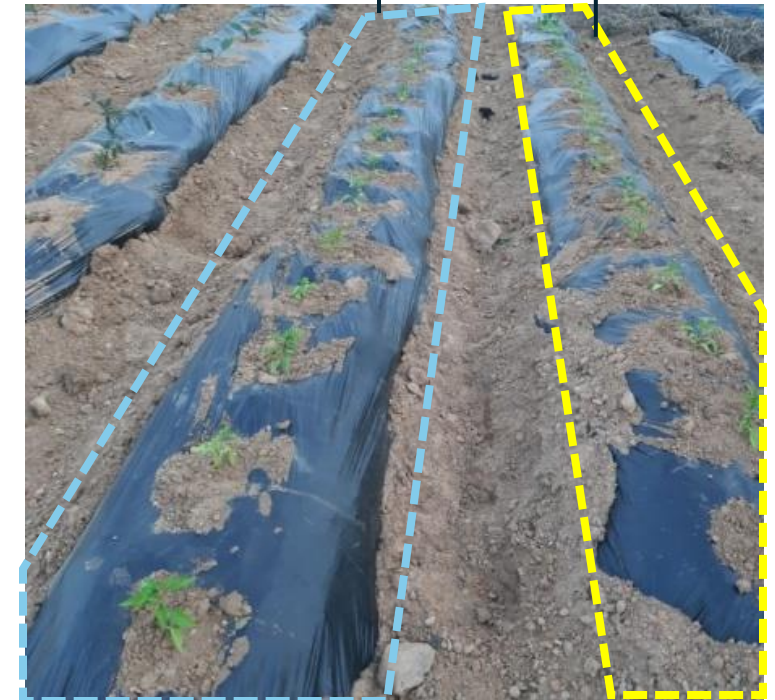
Applying the LONTRA Agri-Booster to pepper farming resulted in significantly innovative and improved outcomes compared to traditional farming methods. Notably, the best results were achieved by tailoring the application method to each growth stage of the peppers

## Preparation Phase

Date	Application Method	Agri-Booster	Water	Remarks
April.22	<ul style="list-style-type: none"> <li>• Compost Application</li> <li>• Ridge Formation</li> <li>• Seeding Watering &amp; Irrigation</li> <li>• Mulching</li> </ul>	pH11.5	pH8.7	Testing Conducted Separately for Each Ridge
May.07	Chili peppers and standard peppers are sown separately.	pH10.9	pH8.7	
May.16	Water Spraying Included	pH10.0		
May.31	Water Spraying Included	pH10.5		
June.28	Water Spraying Included	pH9.9		
August.08	Size and texture were compared after harvest.			

Ridges Treated with LONTRA Vitalizer

Watered Ridge



# PoC Process and Outcome Cases for Chilli Pepper Farming



## Growth Process Comparison

Date	Water	LONTRA Vitalizer	Explanation
May.20			Both methods showed no significant difference in growth
May.28			Both methods showed no significant difference in growth

# PoC Process and Outcome Cases for Chilli Pepper Farming



## Growth Process Comparison

Date	Water	LONTRA Vitalizer	Explanation
June.17			<p>The peppers treated with LONTRA Vitalizer had 1-2 more branches and exhibited more growth compared to those treated with water</p>
July.23			<p>Peppers Grown with LONTRA Vitalizer: Faster Growth, Larger Size, and Double Yield</p>

# PoC Process and Outcome Cases for Chilli Pepper Farming

## Growth Process Comparison

Date	Water	LONTRA Vitalizer	Explanation
August.30			<p>Peppers grown with LONTRA Vitalizer are very fresh and a deep green, while those grown with plain water lack nutrients, turn yellow, and are prone to anthracnose and soft rot.</p>
September.02			<p>LONTRA Vitalizer Peppers: Healthy and Vibrant, Unlike Water-Grown Peppers with Yellowing and Diseases (Water-Grown Peppers: Severe Yellowing, Soft Rot, and Anthracnose)</p>

# PoC Process and Outcome Cases for Chilli Pepper Farming

## Final Evaluation: Yield from Three Pepper Plants

Item	Water	LONTRA Vitalizer	Explanation
<b>Regular Peppers</b>			<p>Peppers grown with LONTRA Vitalizer are vibrant and glossy, yielding 1,455g. In contrast, water-grown peppers, though mostly ripe, suffered significant losses due to anthracnose and soft rot, yielding only 735g.</p>
<b>Cheongyang Peppers (Very Spicy Peppers)</b>			<p>Both samples are disease-free. Water-grown peppers are mostly ripe, yielding 1,165g. Peppers grown with LONTRA Vitalizer have many still green, yielding 1,845g.</p>



# PoC Process and Outcome Cases for Watermelon Farming

Watermelons grown with LONTRA Vitalizer exhibit high sweetness, pronounced natural aroma, and firm texture. Additionally, the size of the watermelons increased by more than 1.5 times.

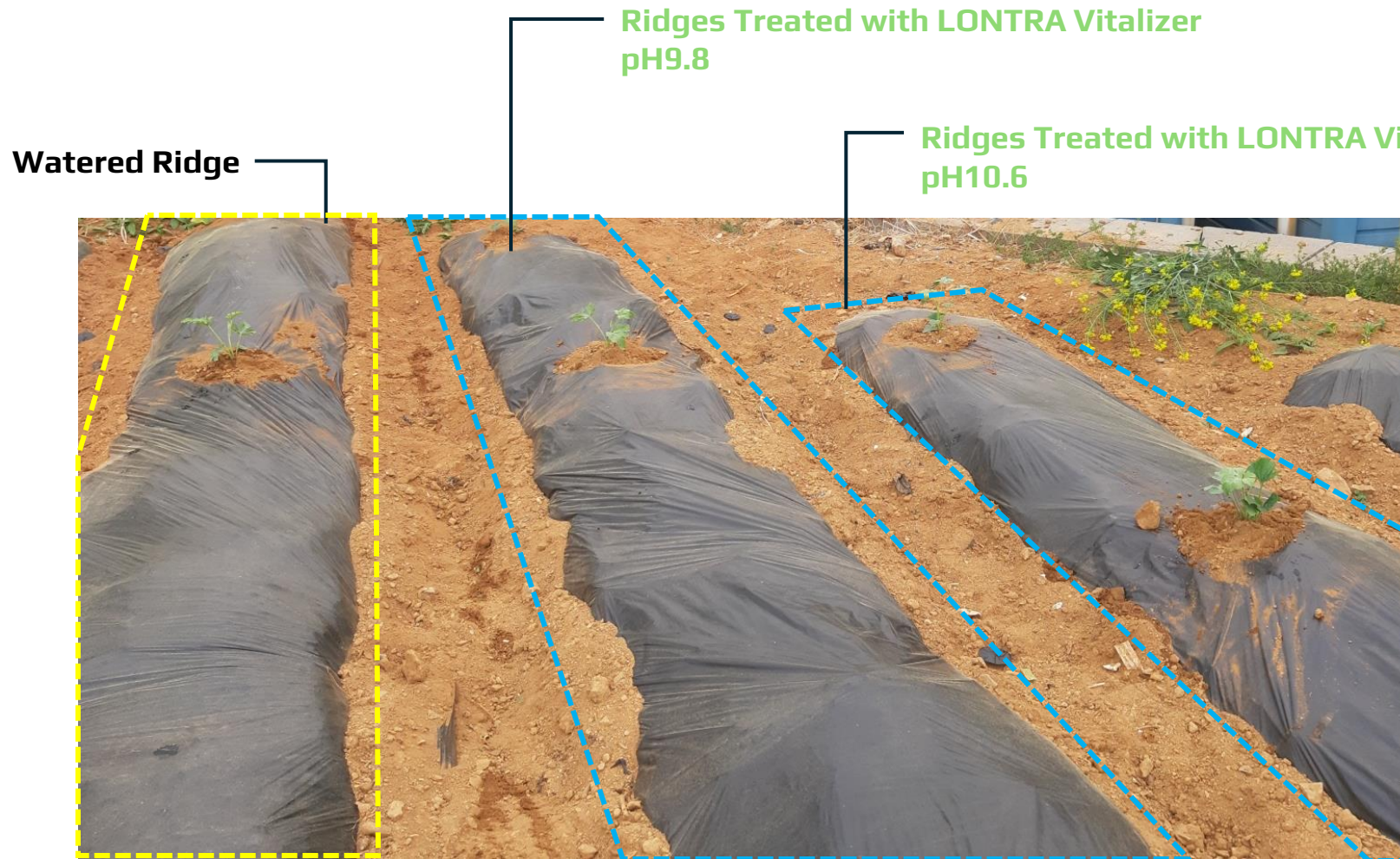
## Preparation Phase

Date	Application Method	LONTRA Vitalizer 01	LONTRA Vitalizer 02	Water
April.16	<ul style="list-style-type: none"> <li>Incorporating compost</li> <li>applying LONTRA Vitalizer, and irrigating</li> </ul>	pH9.8	pH10.6	pH8.7
May.04	Six watermelon plants were divided into groups of two and sown in three separate rows.	pH9.8	pH10.6	pH8.7
May.13	Water Spraying Included	pH9.8	pH10.6	pH8.7
May.24	Water Spraying Included	pH9.8	pH10.6	pH8.7
June.01	Water Spraying Included	pH9.8	pH10.6	pH8.7
June.19	Water Spraying Included	pH9.8	pH10.6	pH8.7
July.09	Water Spraying Included	pH9.8	pH10.6	pH8.7
July.24	Check the yield, size, sweetness, and quality.			

# PoC Process and Outcome Cases for Watermelon Farming



## Preparation Phase





# PoC Process and Outcome Cases for Watermelon Farming









## Growth Process Comparison

Date	Water	LONTRA Vitalizer 01(pH9.8)	LONTRA Vitalizer 02(pH10.6)	Explanation
June.01				<p>The plants given only water seemed to be dying after one week, while those treated with Vitalizer showed strong growth. Growth was similar for Vitalizer pH9.8 and pH10.6</p>
May.28				<p>Plants given only water exhibited slow establishment and poor new shoot growth. Vitalizer pH9.8 resulted in faster establishment compared to pH10.6.</p>

# PoC Process and Outcome Cases for Watermelon Farming









## Growth Process Comparison

Date	Water	LONTRA Vitalizer 01 (pH9.8)	LONTRA Vitalizer 02 (pH10.6)	Explanation
June.29				<p>Watered plants yielded small watermelons with only one of two growing. LONTRA Vitalizer plants produced two watermelons of similar size.</p>
July.09				<p>Watered plants showed slow growth and small size. LONTRA pH9.8 and pH10.6 plants grew larger, with distinct lines and faster growth.</p>

# PoC Process and Outcome Cases for Watermelon Farming



## Growth Process Comparison

Date	Water	LONTRA Vitalizer 01 (pH9.8)	LONTRA Vitalizer 02 (pH10.6)	Explanation
June.29				<p>Watered watermelons only yielded one of the two, as only one grew well. In contrast, the watermelons grown with Agri-Booster had both fruits growing well, allowing for the harvest of both.</p>
July.09				<p>Watered plants showed slow growth and small size. LONTRA pH9.8 and pH10.6 plants grew larger, with distinct lines and faster growth.</p>


# PoC Process and Outcome Cases for Watermelon Farming

## Final Evaluation: Sugar content measurement results

Date	Water	LONTRA Vitalizer 01 (pH10.6)	Explanation
August.09			<p>Watermelons grown with LONTRA Vitalizer exhibited 20% higher sugar content, increased juiciness, and significantly better texture. Notably, Vitalizer pH 10.6 resulted in higher sugar content compared to pH 9.8.</p>

# PoC Process and Outcome Cases for Watermelon Farming

## Final Evaluation: Size

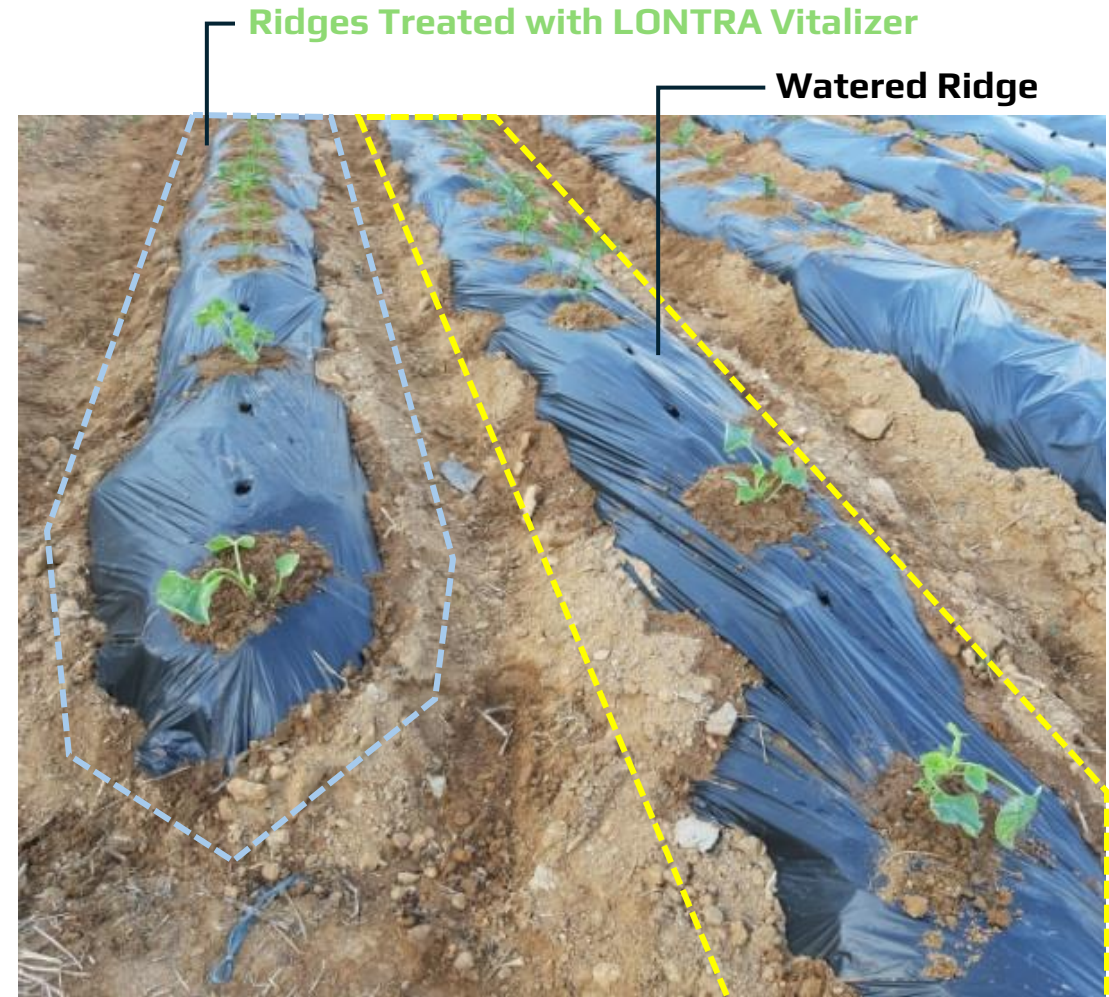
Date	Water	LONTRA Vitalizer 01 (pH9.8)	Explanation
August.09			<p>Watermelons grown with LONTRA Vitalizer (pH 9.8) are more than twice as heavy, with vivid line colors and larger sizes. This is due to the sufficient supply of essential minerals required by the crops, leading to superior results.</p> <p>Additionally, there is a noticeable difference in taste and freshness.</p>

# PoC Process and Outcome Cases for Watermelon Farming

Korean Melons grown with LONTRA Vitalizer showed a 22.4% increase in sugar content and approximately 48% increase in weight and size. Additionally, the texture became firmer, and the fragrance intensified, significantly enhancing marketability.

## Preparation Phase

Date	Application Method	LONTRA Vitalizer	Water
April.22	<ul style="list-style-type: none"> <li>• Compost Application</li> <li>• Ridge Formation</li> <li>• Seeding Watering &amp; Irrigation</li> <li>• Mulching</li> </ul>	pH11.5	pH8.7
April.29	Planted four Korean melon seedlings, two in each group.	pH10.9	pH8.7
May.07	Water Spraying Included	pH10.0	
May.16	Water Spraying Included	pH10.0	
May.31	Water Spraying Included	pH10.5	
June.28	Water Spraying Included	pH9.9	
July.10	Check the yield, size, sweetness, and quality.		



# PoC Process and Outcome Cases for Watermelon Farming



## Growth Process Comparison

Date	Water	LONTRA Vitalizer	Explanation
May.20	 A photograph showing a watermelon seedling in a field. The plant is small and appears to be in the early stages of growth. The soil is reddish-brown and the plants are spaced out.	 A photograph showing a watermelon seedling in a field. The plant is significantly larger and more developed than the one in the water group, with several large, green leaves.	The group treated with LONTRA Vitalizer exhibited slightly faster growth.
May.28	 A photograph showing a watermelon seedling in a field. The plant is larger than on May 20 but still appears somewhat sparse.	 A photograph showing a watermelon seedling in a field. The plant is very large and dense, with many large, green leaves, indicating rapid growth.	The group treated with LONTRA Vitalizer exhibited slightly faster growth.

# PoC Process and Outcome Cases for Watermelon Farming



## Growth Process Comparison

Date	Water	LONTRA Vitalizer	Explanation
June.17	 A circular inset shows a watermelon plant with narrow, upright leaves and a small, green melon. The background image shows a wider view of the watermelon field with similar plants.	 A circular inset shows a watermelon plant with broad, spreading leaves and a large, green melon. The background image shows a wider view of the watermelon field with similar plants.	<p>The leaves of the plants treated with LONTRA Vitalizer are broader, and the Korean melons are more than twice as large.</p>
July.10	 A circular inset shows a watermelon plant with narrow, upright leaves and a small, yellow melon. The background image shows a wider view of the watermelon field with similar plants.	 A circular inset shows a watermelon plant with broad, spreading leaves and a large, yellow melon. The background image shows a wider view of the watermelon field with similar plants.	<p>The plants treated with LONTRA Vitalizer grew about one week earlier and were significantly larger compared to those given only water.</p> <p>The Korean melons treated with LONTRA Vitalizer were larger in size and had a stronger fragrance.</p>



# PoC Process and Outcome Cases for Watermelon Farming



## Final Evaluation:

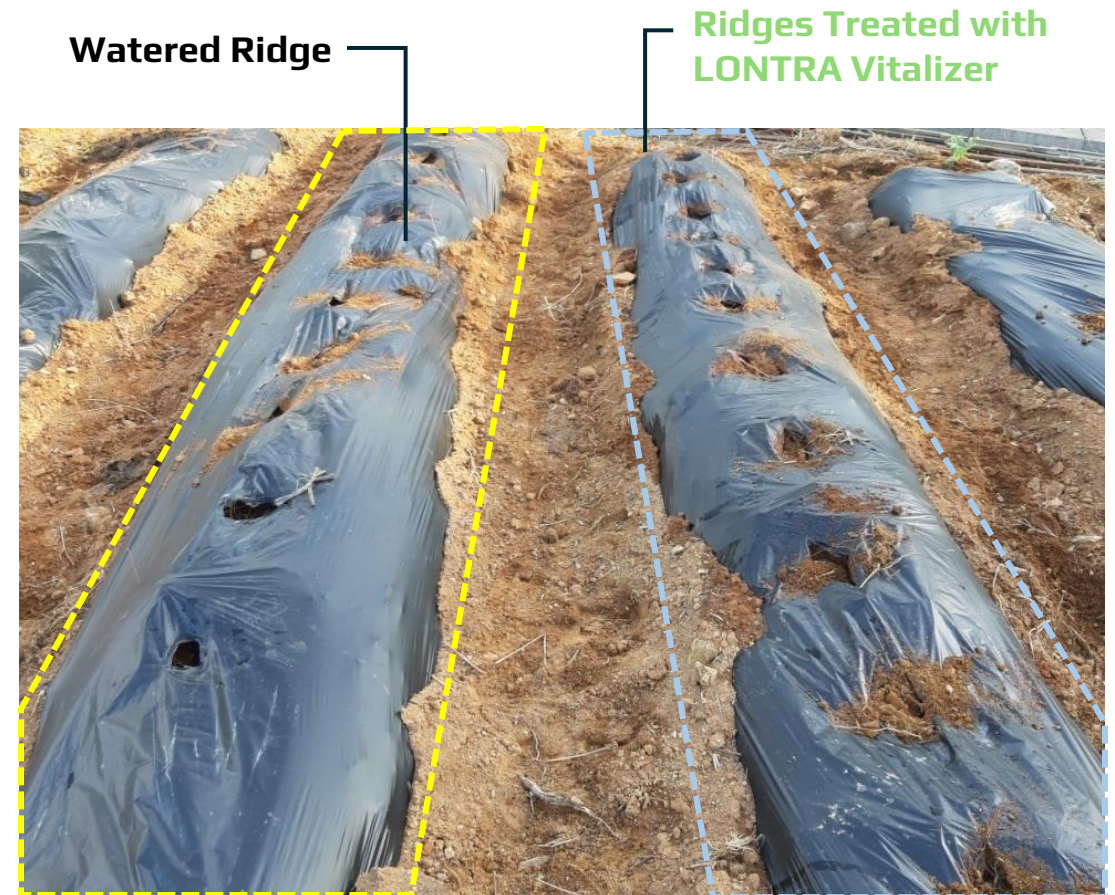
Date	Water	LONTRA Vitalizer 01 (pH10.6)	Explanation
July.24			<ul style="list-style-type: none"> <li>• <b>Weight:</b> Four Korean melons treated with Agri-Booster had a total weight of 2.115 kg, while four Korean melons given only water had a total weight of 1.545 kg, indicating a 48% higher weight for the Agri-Booster treated melons..</li> <li>• <b>Sugar Content:</b> The sugar content of Korean melons treated with Agri-Booster was 16.5 Brix, while the sugar content of melons given only water was 12.8 Brix, indicating a 22.4% higher sugar content for the Agri-Booster treated melons.</li> <li>• <b>Texture and Fragrance:</b> The Korean melons treated with</li> </ul>

# PoC Process and Outcome Cases for Potato Farming

Potatoes treated with LONTRA Vitalizer have exhibited a 62.5% increase in growth compared to standard potatoes. They also retain their distinct potato aroma and superior quality when boiled, without any bitter taste.

## Preparation Phase

Date	Application Method	LONTRA Vitalizer	Water
April.22	<ul style="list-style-type: none"> <li>• Compost Application</li> <li>• Ridge Formation</li> <li>• Seeding Watering &amp; Irrigation</li> <li>• Mulching</li> </ul>	pH11.5	pH8.7
April.29	Planted 22 potato pieces, divided into two groups of 11 each.	pH10.9	pH8.7
May.07	Water Spraying Included	pH10.0	
May.16	Water Spraying Included	pH10.0	
May.31	Water Spraying Included	pH10.5	
June.28	Water Spraying Included	pH9.9	
July.19	Quality, and weight have been verified and compared		



# PoC Process and Outcome Cases for Potato Farming






## Growth Process Comparison

Date	Water	LONTRA Vitalizer	Explanation
May.28			<p>The potato seeds have significantly degenerated, resulting in poor growth. Both water and LONTRA Vitalizer show similar growth results.</p>
May.31			<p>Potatoes treated with LONTRA Vitalizer exhibit faster growth, with stronger leaves and stems.</p>

# PoC Process and Outcome Cases for Potato Farming





## Growth Process Comparison

Date	Water	LONTRA Vitalizer	Explanation
July.03			Potatoes treated with LONTRA Vitalizer show significantly accelerated growth.
July.12			While the potatoes are maturing and turning yellow, those treated with LONTRA Vitalizer maintain much fresher leaves and stems.

# PoC Process and Outcome Cases for Potato Farming



## Final Evaluation: Weight, taste & aroma

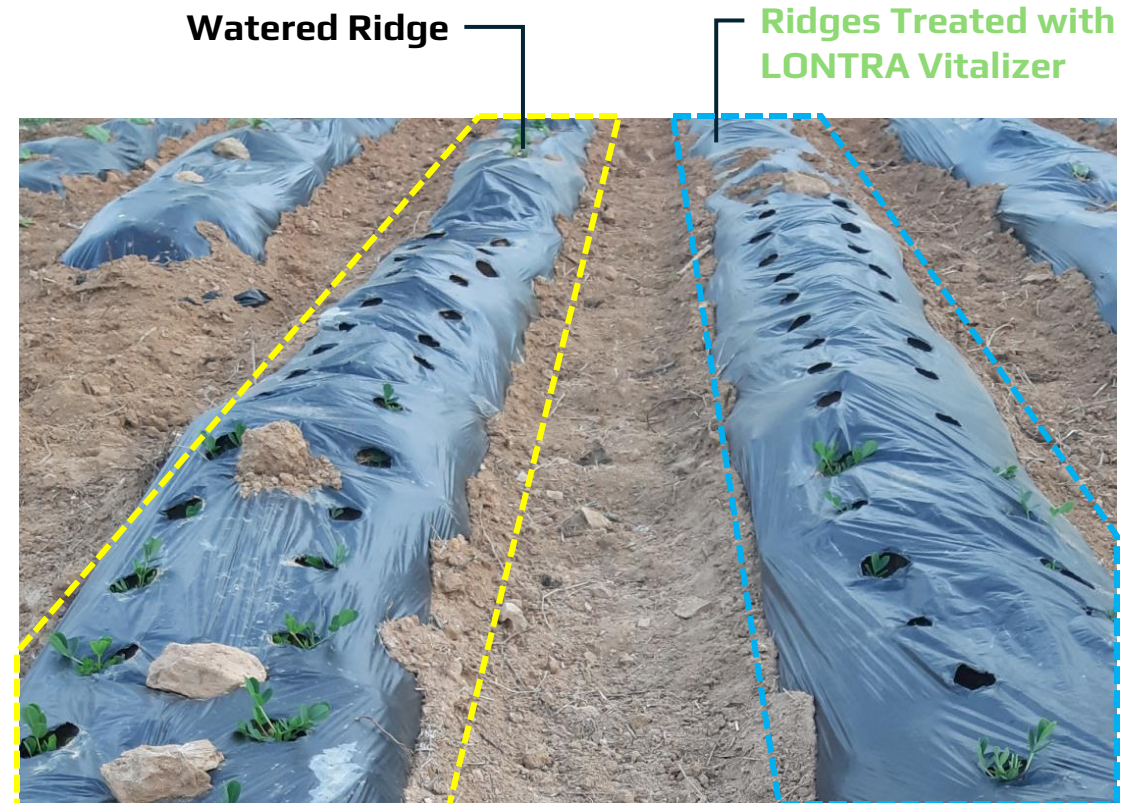
Date	Water	LONTRA Vitalizer 01 (pH10.6)	Explanation
July.19		 <p data-bbox="744 1168 1526 1205">Results from planting and harvesting 11 potato plants</p>	<ul style="list-style-type: none"><li>• Weight: Potatoes treated with LONTRA Vitalizer yielded 6.5 kg, compared to 4 kg from those treated with water, showing a 62.5% increase.</li><li>• Taste and Aroma: When boiled, potatoes treated with LONTRA Vitalizer had no bitter taste and retained a strong, distinctive potato aroma, indicating superior quality.</li></ul>

# PoC Process and Outcome Cases for Corn Farming



## Preparation Phase

Date	Application Method	LONTRA Vitalizer	Water
April.22	<ul style="list-style-type: none"> <li>• Compost Application</li> <li>• Ridge Formation</li> <li>• Seeding Watering &amp; Irrigation</li> <li>• Mulching</li> </ul>	pH11.5	pH8.7
May.07	Planted 40 corn seeds, divided into two groups of 20 each	pH10.9	pH8.7
May.16	Water Spraying Included	pH10.0	
May.31	Water Spraying Included	pH10.5	
June.28	Water Spraying Included	pH9.9	
August.08	Quality, and weight have been verified and compared		



# PoC Process and Outcome Cases for Corn Farming



## Growth Process Comparison

Date	Water	LONTRA Vitalizer	Explanation
May.20			<p>Corn treated with LONTRA Vitalizer germinated faster and grew more quickly and healthily.</p>
May.31			<p>Corn treated with LONTRA Vitalizer shows superior growth and better development, with larger, healthier leaves.</p>

# PoC Process and Outcome Cases for Corn Farming



## Growth Process Comparison


Date	Water	LONTRA Vitalizer	Explanation
June.17			<p>Corn treated with LONTRA Vitalizer shows superior growth and better development, with larger, healthier leaves.</p>
June.24			<p>Corn treated with LONTRA Vitalizer excels in leaf size, fullness, and health.</p>



# PoC Process and Outcome Cases for Corn Farming



## Final Evaluation:

Date	Water	LONTRA Vitalizer 01 (pH10.6)	Explanation
August.08	 	 	<ul style="list-style-type: none"><li>• Appearance: Corn treated with LONTRA Vitalizer has uniform kernels.</li><li>• Size: Corn treated with LONTRA Vitalizer is larger and uniformly sized, leading to increased yield and production.</li><li>• Taste and Aroma: When boiled, corn treated with LONTRA Vitalizer exhibits a strong, characteristic sweetness, indicating superior quality.</li></ul>

# AGRIBOOSTER



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