





Plantos Verde®: Sustainable Solution for Enhanced Vegetables Production

Presented by:

AGRIMEDIC Licensed Distributor of Plantos Verde[®] in Africa (SADC), USA and Columbia.

Introduction

AGRIMEDIC AFRICA (PTY) LTD is honoured to be authorised distributor with certain exclusive areas in Africa for **Plantos Verde®**, a ground-breaking product designed to support plant health, increase crop yield and advanced in sustainable agriculture. As a leading player in the vegetable industry, our clients stands to gain significantly from Plantos Verde[®]'s ability to boost vegetables productivity, enhance vegetable quality and reduce CO2 footprint. This presentation demonstrates how Plantos Verde[®] can optimize your operations and support your sustainability objectives.

What is Plantos Verde®?

- **Composition**: A natural mineral powder made from **micronized calcite** (calcium carbonate, CaCO₃), sourced from selected premium mineral deposits.
- **Production Process**: Manufactured using a patented **tribomechanical activation**



(TMA) process, which mechanically grinds calcite into micronic and nanosized particles, enhancing bioactivity without chemicals.

 Nanotechnology: Recognized as a Nano technological innovation, Plantos Verde[®] delivers exceptional plant health benefits through cutting-edge science. The particle size brings physical, biological and chemical attitudes of calcium together for the benefit of vegetation.

How Plantos Verde® Works

Application Method

 Applied as a foliar spray: Mixed with water to create a 0.3-0.5% colloidal solution and sprayed evenly onto vegetables leaves using standard or precision equipment.

Cellular Penetration

- Leaf Absorption: Nano-sized particles penetrate the leaf cuticle, reaching mesophyll cells where critical plant functions occur.
- **Calcium Delivery**: Releases bioavailable calcium ions (Ca²⁺) that enter cells via membrane channels.
- Cellular Impact:
 - Reinforces **cell walls** by integrating with pectin.
 - Stabilizes cell membranes, enhancing stress tolerance.
 - Supports enzyme activity and cellular signaling.

Physiological Effects on Vegetables

- **Photosynthesis**: Boosts chlorophyll levels, improving energy production and giving vegetable-plants a lush green appearance.
- Water Regulation: Enhances transpiration efficiency, optimizing water utilization a key advantage for vegetables climates.
- Immunity: Strengthens resistance to pests (e.g., cane borers), diseases (e.g., smut), stress (e.g., drought) and mildew/botrytis.
- Increased root biomass: The organic matter built up by application of Plantos Verde, builds up humus and thus help the soil retain moisture, reducing



water loss and improving plant resilience. Therefor within days, with lasting benefits from 3–5 seasonal applications. All changes to the metabolism of the plants can be controlled by measuring the Brix–number on a regular basis in fruits, stern and leaves.

Key Benefits for Vegetables Production

1. Increased Yields:

- Raises productivity by 20-30% on average, with potential peaks up to 50% for vegetables .
- Ensures stable yields year-to-year, supporting consistent fruit output.
- 2. Enhanced biomass, aroma, amino-acid and color:
 - Elevates biomass versus humidity, thus increase the storage capacity of vegetable.
 - Increases dry matter to be measured in height and diameter of the stern, and pant giving a higher yield

3. Improved Resilience:

- Fortifies vegetables against pests, diseases, insect attack and environmental stress, minimizing losses.
- Enhances adaptability to regional challenges like drought.

4. Earlier Harvests:

• Speeds up maturation by **10-20 days**, accelerating production cycles.

5. Sustainability:

- Cuts reliance on synthetic fertilizers and pesticides by up to 50%, aligning with eco-friendly practices.
- Promotes natural plant vitality for sustainable farming.

Reducing the Carbon Footprint: A Win for our Clients

Plantos Verde[®] supports our Clients sustainability goals by significantly lowering the environmental impact of vegetables production:



1. Lower Input Emissions:

• Reduces synthetic fertilizer and pesticide use, cutting emissions from production energy of fertilizer and their application.

2. Enhanced Resource Efficiency:

- Higher yields per hectare reduce land and energy needs, lowering operational emissions.
- Improves water use efficiency, decreasing irrigation-related energy/water costs.

3. Carbon Sequestration Boost:

- Enhanced photosynthesis increases CO₂ uptake, potentially adding 10 20% more carbon sequestration per hectare.
- Stronger roots and biomass lock more carbon into the soil on permanent basis
- 4. Low-Carbon Production:
 - Mechanical production process emits far less CO₂ than chemical fertilizers. (1 mt of Plantos Verde needs about 50KWH energy in production)
 - Minimal application rates (2-3 kg/ha) reduce transport emissions.

Potential Savings for a 10,000-ha Operation

- Emission Reduction: Up to 5,500-21,000 t CO₂e/year, equivalent to removing thousands of cars from the road.
- Sustainability Impact: Positions our Clients as leaders in low-carbon vegetable production.

Application for Vegetables

- **Dosage**: 2-3 kg/ha per treatment, with 3-5 applications per season.
- **Timing**: Begin at leaf formation, repeat every 15-20 days, ideally in calm weather.
- **Compatibility**: Avoid untested chemical mixes; test combinations as needed.



Trials suggest vegetables could achieve:

- Yield increases of 20-40%.
- Sugar content gains of 2~3%.
- Pesticide reductions of **30-50%**.

Why Plantos Verde® for our Clients?

- Economic Benefits: Higher yields, better vegetables/quality, better storage capacity and lower input costs drive profitability.
- Sustainability Leadership: Reduces emissions and supports carbon-neutral goals.
- Market Advantage: Produces premium, eco-friendly vegetable for discerning markets.
- Scalability: Proven globally, ready for our Clients diverse operations.
- Marketing advantage: The low carbon footprint allows our Clients the sell this advantage to large consumers of vegetable like soft-drink industry.

Conclusion

Plantos Verde[®] offers our Clients a powerful tool to enhance vegetables production while advancing sustainability. Its nanotechnology delivers healthier plants, higher yields, and a reduced carbon footprint—perfectly aligning with your economic and environmental priorities. We propose a **pilot trial** on your estates to showcase these benefits first-hand and set the stage for a transformative partnership.

Contact Information: AGRIMEDIC AFRICA GROUP - info@agrimedic-global.com

