

# GrowMás Potato Demonstration Trial – Chiriquí Highlands, Panama (2024)

**Location:** Cerro Punta, Tierras Altas, Chiriquí | **Producer:** Iván Beros | **Crop:** Potato (Granola)  
**Plot Size:** 4,000 m² | **Trial Period:** July – October 2024 | **Lead Agronomist:** Ing. Federico Selles

## Overview

Building on successful 2023 results in banana and coffee, GrowMás was evaluated in a highland potato system. Applications followed crop stages, and the demonstration plot received the same agronomic management as the control, highlighting the contribution of GrowMás to crop performance.

## Protocol & Timeline

Sowing	First Application	Second Application	Third Application
July 4, 2024	July 20 (16 days after sowing)	Aug 8 (19 days after 1st)	Aug 21 (13 days after 2nd)

## Soil & Agronomic Practices

Soil analysis (University of Panama) characterized a sandy-loam soil (pH 5.8), rich in organic matter, high in phosphorus, and medium in potassium—well-suited for potatoes. The producer applied hydrogen peroxide for soil oxygenation and incorporated mycorrhizae to improve nutrient uptake and resilience.

## Field Vigor & Canopy

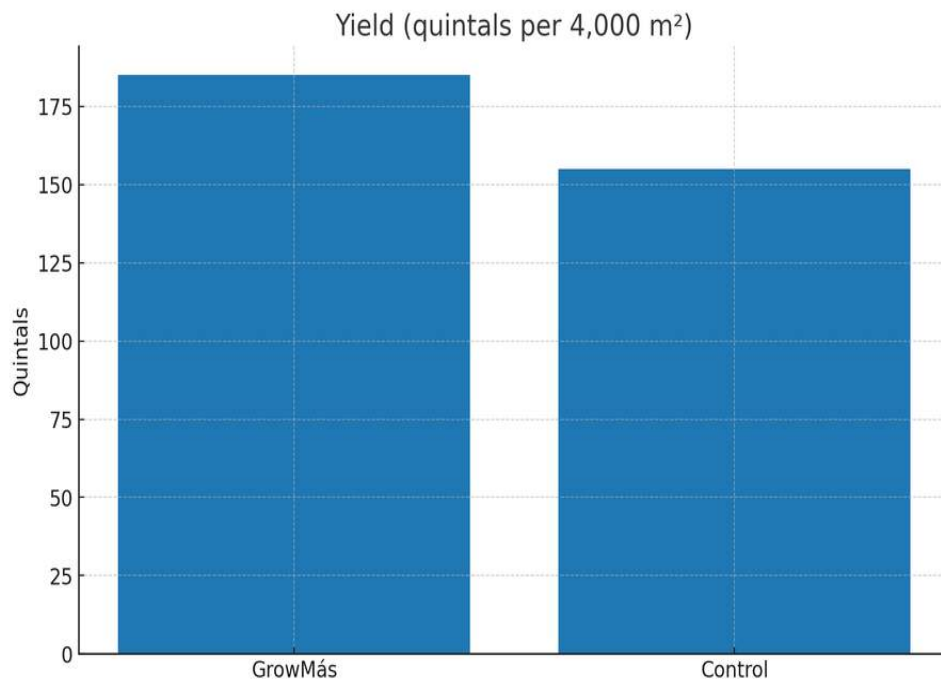
Through August, the GrowMás plot showed visibly greater greenness and denser foliage than the control under identical fertilization. This translated into a stronger, more uniform stand ahead of harvest.

## Pest and Disease Management

Seasonal challenges were managed effectively in both plots. Leaf miner fly was controlled with Abamectin, and high-humidity late blight pressure was addressed with Metalaxyl + Mancozeb. The GrowMás plot maintained excellent leaf quality throughout.

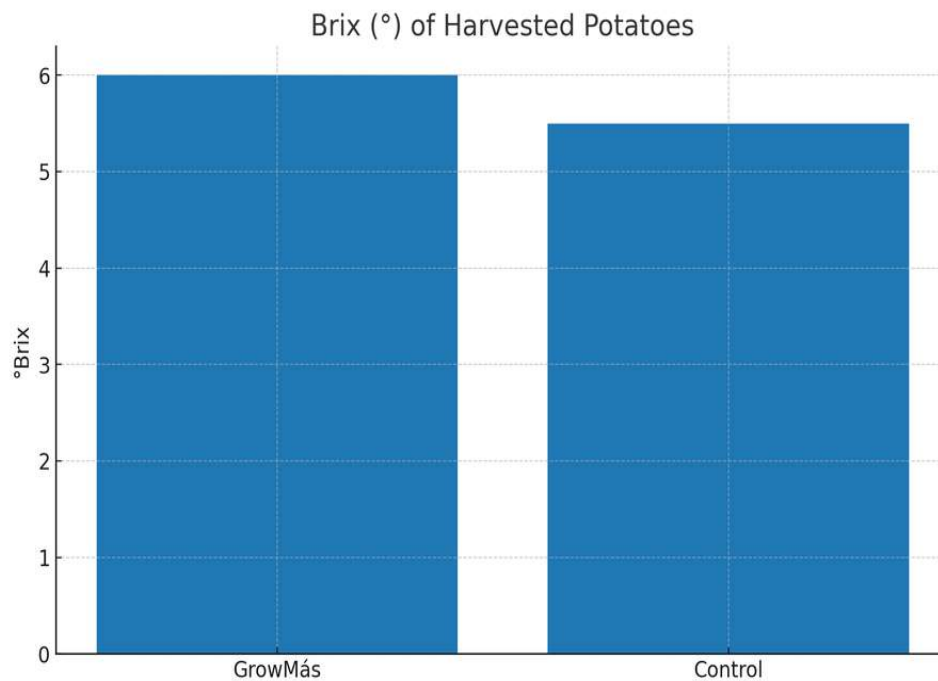
## Yield Results

The GrowMás plot delivered a 19% yield advantage over the control (+30 qq per 4,000 m²).



## Quality & Laboratory Findings

Metric	Control	GrowMás	Highlight
°Brix (sugar)	5.50	6.00	+0.50° (≈9% increase)
Potassium (K, %)	0.15	0.23	Higher K in GrowMás
Calcium (Ca, %)	0.09	0.12	Higher Ca in GrowMás



Laboratory report excerpt (University of Panama):

**Facultad de Ciencias Agropecuarias • Universidad de Panamá**  
Educación para un mejor Futuro del Sector Agropecuario, la Gastronomía y la Familia

**LABORATORIO DE SUELOS Y AFINES**

Resultados Confiables al Alcance del Productor Nacional

**Análisis Químico**

ATENCIÓN: ING. FEDERICO SELLES  
 LUGAR: CERRO PUNTA, TIERRAS ALTAS, CHIRIQUÍ  
 MUESTRA: PAPA  
 FECHA: 1 DE NOVIEMBRE DE 2024

N°	COD.	DESCRIPCIÓN	Materia	Materia	Humedad	Materia	Ceniza	N	P	K	Ca	Mg	Fe	Cu	Mn	Zn	Na	°Brix
			Pre Seca 65°C	Seca 100°C		Orgánica 550°C												
			<b>%</b>															
			<b>mg/Kg = mg/L = ppm</b>															
M-1	V-009	Papa, Testigo	16.03	92.09	7.91	86.78	5.31	0.99	0.28	0.15	0.09	0.134	32.16	3.78	0.60	18.96	82.43	5.50
M-2	V-010	Papa, Grow más	18.63	92.34	7.66	87.53	4.81	0.94	0.23	0.23	0.12	0.133	10.29	2.02	0.52	15.51	134.75	6.00

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Denominación  
**#YoSoyFCA**

## Summary

The Chiriquí Highlands demonstration confirms GrowMás as a valuable tool for potato production—driving higher yields, vigorous plant growth, and measurable gains in key quality metrics (°Brix, K, Ca). The trial maintained strong agronomic performance under standard integrated pest and disease management.