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## 3<sup>rd</sup> Party Summary **Trials Yield and Health Outcomes**

*	Yield Increase	Health
Corn	11.7%	++
Grape	6.5%	+++
Strawberry	9.8%	++
Cabbage	9.1%	++++
Peach	5.1%	+++
Blueberry	9.6%	+++

****	Yield & Plant health	Wine taste & smell
****	Increase	improvement
Grape	+++	8/8 by Agrea

•	Yield Increase	Health
Iceberg Lettuce	31%	++++
Banana	15%	++++
Rice (Paddy)	12%	++++
Tomato	18 %	++++

	Plant Health	Yield Increase
Banana/ Plantain	++++	15%
Sour Sop	+++	
Dragon Fruit	+++	
Coffee Bean	+++	

<b>S</b>	Yield Increase	Comment
Corn	10%	10cm Taller
Tomato	+++	New Growth
Beans	12%	Green Healthier
Oats	10%	59cm Taller







## **Corn Trial** - Guelph, Ontario, Canada

GrowMas treated -higher yield of 212.63 bushels vs untreated control 187.7 bushels. Larger height and thicker stems. No phytotoxicity symptoms. In drought, 20cm less rain fall then yearly average

## **Grape Trial** -Niagara Falls (wine region), Ontario, Canada

GrowMas treated grape vines were longer, greener and leaves were larger. GrowMas treatment yielded 14.75 kg grapes vs 13.79 kg and had higher Brix than the untreated grapes. No phytotoxicity symptoms were observed.

## Strawberry Trial -Brantford, Ontario, Canada

Greener, larger, fuller plants despite drought year. Higher yield of 7.03 kg vs 6.34 kg. **Agronomist comments**: Treatment had numerically better vigor than the untreated check.

## Cabbage Trial -Guelph, Ontario, Canada

GrowMas had 26.27 kgs higher yield vs 23.88 kg in the control.

**Agronomist comments:** plots treated with GrowMas had a numerically higher average vigor, with slightly more luscious and green plants.

## Peach Trial -Niagara, Ontario, Canada

The leaves of the trees treated with GrowMas greener than the untreated trees. Higher yield of 6.38 kgs vs 6.06 kgs in control. Higher Brix and healthier peach appearance. No phytotoxicity.

**Agronomist comments**: Treated peaches has numerically better vigor than the untreated check.

## Blueberry Trial -Simcoe, Ontario, Canada

GrowMas had a higher yield 1.66kgs vs 1.50 kgs in control. Higher brix readings. No phytotoxicity. **Agronomist comments** Treated had numerically higher yield.



GrowMas was tested on rice paddy, banana, tomatoes, apples, ornamental flowers, carrots, egg plant, chillies, cucumber, beetroot, onion and garlic. Yield increases observed in all crops tested. All trials were done in house as initial trials.

Trialed on bananas exhibiting Fusarium Wilt, district of Tamilnadu, India. Observations of increasing plant vigor and increasing immunity to Fusarium Wilt.

#### Lettuce Trial, Nilgiris District of Tamil Nadu.

A third-party trial on Iceberg lettuce yielded 9983.3 Kg/ac vs 6884 Kg/ac in control which gave a significant yield increase.





#### Paddy (Rice)

The sprayed plants were full of vigor in growth and in health, there was a 12% increase in yield in comparison with control. The plants were much greener, taller and had a sturdy stem width too.

#### Banana:

India being the highest banana growing country and much less of export compared with Ecuador. The trials on Banana were held Tamilnadu, namely the district of Theni, Tiruchirappalli, Erode and Salem. The banana plants were sprayed right from 30 days till a month before harvest. The plants were healthy and the yield was 15% higher in comparison with control. The farmer Mr. Ammiaraj from the Tiruchirappalli district got the "Farmer of the year" award for getting the highest yield of 26 tons/acre. The plant health improved tremendously the usual diseased symptoms were not observed in the continuously sprayed plants.

#### Tomato:

In Tomatoes the treated had a 18 % higher yield/ acre than the untreated plants. The plants had higher growth vigor and then plants out lived the unsprayed ones and it extended by 1.5 months and continued to yield even after the normal growing period.

#### **Ornamental plants:**

Jasmine is cultivated commercially for the perfume and flowers are used in garlands. Growmas sprayed plants increases the plant vigor and flowering. The plants were healthy and continued to flower for longer periods than unsprayed plants.

#### **Apples:**

The apple trials were conducted in Kashmir, the largest apple growing area in India. The apples were sprayed every 20 days, the trees showed increased foliage and the number of sellable apples were 12% higher in comparison with the untreated trees.



#### **Grape Trial - Tuscany (Summer 2022)**

www.Agrea.it with University of Verona

Higher Brix, Higher Yield, Visible plant health improvement in drought conditions, longer greener vines Improved quality in wine, perfect 8/8 on taste analysis and whereas the untreated had a score of 5.3/8.

**Professors' comments:** "Its composition is completely original and breaks away from benchmarks often based on seaweed or legume hydrolysates."

"Effect of treatments on wine quality interesting result on tasting wine after micro vinification regarding the treated plots with GrowMas at 5L/Ha. The most interesting results were obtained by evaluating the taste/odor of the wine. In particular, it is the general score of the wine that appeared **statistically significant for the GrowMas** treatment at 5L/Ha"

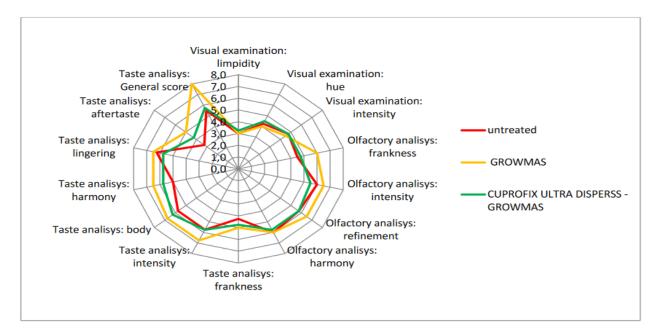
"The most relevant effects were observed against water stress (drought), which appeared very reduced on the treated plants, which presented a deep green foliage without stress symptoms"





AGREA Study Code: gep041-22-el





Bloomberg News: Aug 2022 "Europe's Drought May Be Continent's Worst in at Least 500 Years"

CNBC News: Aug 2022 "Europe is experiencing its worst drought in at least 500 years"



## Belize

GrowMas was tested on banana, plantain, coffee bean, avocado, sour sop, dragon fruit, increases in plant health and yield increase was observed in all crops tested. All trials were done by commercial farmers, PhD agronomists and independent research institutions to test its bio-efficacy in term of crop vigor, plant health and yield.

In all the trials done by independent researchers the common observation was higher yield and most importantly the quality of the final produce increased significantly in terms of size, sweetness of the fruits (brix), overall external colour or texture and improved plant health. All farmers using GrowMas achieved higher cost benefit ratio when using products. The treated plants showed increased growth vigor as the increased chloroplasts lead to trapping of more energy from the sun which eventually leads to higher yield. GrowMas helps absorption of nutrients from the soil, transportation by opening the vascular bundles in the root and stem which stimulates overall plant health. It is an organic product it does not leave any residue during harvest. GrowMas helps in tolerating water stress and still achieve higher yields.

**Testimonials**: 1) Banana/ Plantain farmer (Yield Increase data) Click here

- 2) PhD agronomist (Banana and Coffee trials) Click here
- 3) Research Farm Founder (Banana) Click here







In 2022, we held several trials in Mexico to test GrowMas performance on several different crops. Despite the major drought significant results were found in every trial.

We encouraged farmers to follow company protocols regarding dosage, quantities and application frequency. Two main results: Higher production and healthier plants.

## **Crop: Corn**

Irrigation: Only at the beginning

Planting Date: Early July 2022 - Harvest date: Early January 2023

Weather conditions: Drought

Application method: Spray over plants and soil drench, 5ml per liter of water

Results: Sprayed plants were on average 10 cm taller than unsprayed Sprayed plants showed a 10% more grain weight than unsprayed

## **Crop: Tomato**

Irrigation: Continuous

Planting date: Late September 2022 - Plant removal date: January 2023

Weather conditions: Greenhouse

Application method: Sprayed over plants, 3ml per liter of water

Results: We started applying GrowMas in December, practically when plants were at the end of their cycle, for observation. The product was sprayed over 10 plants; new sprouts and new fruits appeared on sprayed plants, while we are the installed.

while unsprayed plants just died.

## **Crop: Dahlia Plants (Mexico's National Flower)**

Irrigation: as required

Planting date: April 2022 - Plant removal date: December 2022

Weather conditions: Greenhouse

Application method: Sprayed over plants, 3ml per liter of water

Results: We started applying GrowMas in November, practically when plants were at the end of their cycle for

observation. The product was sprayed over 20 plants, we observed that new sprouts and new flowers

appeared on plants, while unsprayed plants just died.

#### **Crop: Beans**

Irrigation: as required

Planting date: Late July 2022 - Harvest date: Late November 2022

Weather conditions: Open sky, Drought

Application method: Sprayed over plants, 3ml per liter of water

Protocol: First at 10 days after planting, Second at 30 days, Third at 45 days

Results: Sprayed plants were fuller, greener and visibly healthier. At least 20% more leaves and 12% more

weight in grain





Crop: Oat

Irrigation: just at the beginning

Planting date: August 2022 - Harvest date: December 2022

Weather conditions: open sky, Drought

Application method: Sprayed over plants 5ml per liter of water

Protocol: 1 spray every 15 days, starting 10 days after planting, 4 applications

Results: Sprayed plants averaged a 59 cm height, and last at least 10 days more in vegetation stage, compared to unsprayed plot, which was around 9 to 10 cm shorter. The production wasn't for grain, but for bales. They

obtained 10% more bales per hectare in sprayed lands against unsprayed ones.

**Crop: Cucumber** 

Irrigation: Continuous Planting date: Jan 2023

Weather conditions: Greenhouse

Applications method: sprayed over plants, 2ml per liter of water

Results: 100% Germination rate in treated, 15% loss with commercial standard products

## **Conclusion**

GrowMas performed very well under hard conditions. Participating farmers and researchers are positively surprised about results. Personally, I'm convinced about GrowMas's effectiveness, and as a consequence, the need of performing larger and more structured trials, expanding to new latitudes and new crops.

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