



PRO-MIX[®]

AGTIV[®]



ORNAMENTAL EFFICACY REPORT

CANADA



AGTIV **AMPLIFY**

AGTIV AMPLIFY® PROVIDES A HEALTHY AND EXPANDED ROOT SYSTEM THAT ABSORBS MORE NUTRIENTS AND WATER THANKS TO **BACILLUS** & **MYCORRHIZAE**

+ **BACILLUS + MYCORRHIZAE**

PTB297 + PTB180
Technologies

- ++ Amplifies root system
- ++ Improves nutrient and water uptake
- ++ Increases plant strength and productivity



LEARN MORE ABOUT
AGTIV AMPLIFY[®]
TECHNOLOGY

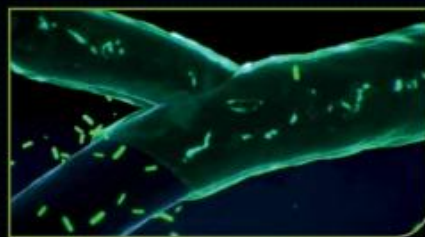
AGTIV **STIMULATE**

AGTIV STIMULATE® REINFORCES PLANTS WITH A HEALTHY ROOT ZONE THANKS TO **BACILLUS**

B **BACILLUS**

PTB180 Technology,
Bacillus pumilus

- + Stimulates rooting environment
- + Improves plant establishment
- + Increases plant vigor and productivity



LEARN MORE ABOUT
AGTIV STIMULATE[®]
TECHNOLOGY

AGTIV **REACH**

AGTIV REACH® HELPS PLANTS REACH AND ABSORB MORE NUTRIENTS AND WATER THANKS TO **MYCORRHIZAE**

M **MYCORRHIZAE**

PTB297 Technology,
Rhizophagus irregularis
(formerly known as
Glomus intraradices)

- + Expands root system
- + Enhances nutrient and water uptake
- + Promotes plant robustness and vigor



LEARN MORE ABOUT
AGTIV REACH[®]
TECHNOLOGY

TABLE OF CONTENTS

	FORMULATION			TECHNOLOGIES		Page
	BK	BX	HP	AGTIV REACH	AGTIV AMPLIFY	
Alocasia		✓	✓		✓	4
Angelonia	✓				✓	6
Asparagus		✓			✓	7
Asplenium Nidus Campio		✓	✓		✓	9
Begonia		✓			✓	10
Bougainvillea			✓	✓		11
Calathea		✓			✓	13
Calibrachoa	✓	✓		✓	✓	14
Coffee		✓			✓	17
Dieffenbachia		✓			✓	19
Fuchsia		✓			✓	20
Geranium		✓			✓	21
Geraniums & Asparagus		✓			✓	22
Monstera Deliciosa		✓			✓	23
New Guinea Impatiens		✓			✓	24
Petunia	✓	✓			✓	25
Poinsettia			✓		✓	26
Vinca	✓	✓	✓	✓	✓	33

EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

ALOCASIA

PRODUCT DEMONSTRATION: Wekiwa Gardens | Apopka | FL

OVERVIEW

Treatments: A. Competitor product J
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: *Alocasia micholitziana* 'Velvet Elvis'

Dates: Start: September 18, 2024 - End: February 18, 2025

Crop Time: 22 weeks

Container Size: 6-inch pots

OPERATIONAL NOTES

Fertilization: Peters 20-10-20 liquid fertilizer, 200 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B produced plants that were statistically larger, yielding higher shoot fresh weights and shoot dry weights.

Observations: Plants grown in Treatment B were visibly larger and bigger.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)	SIZE INDEX (cm)
A	177.21	---	13.76	---	49.1
B	188.99	+6.4%	17.21	+22.3%	50.01

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).

Size Index: (Length + Perpendicular width + Height) / 3



EFFICACY REPORT

ALOCASIA

PRO-MIX® BX & HP® AGTIV AMPLIFY®

PRODUCT DEMONSTRATION: Central Florida Ferns & Foliage | Zellwood | FL

OVERVIEW

Treatments: A. Competitor product D
B. Competitor product E
C. PRO-MIX® BX AGTIV AMPLIFY®
D. PRO-MIX® HP® AGTIV AMPLIFY®

Variety: Alocasia Cuprea 'Red Scarlet'

Dates: Start: January 24, 2023 - End: April 11, 2023

Crop Time: 11 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Weeks 1-8: 20-9-20, 100 ppm N
Weeks 9-11: 20-20-20, 150 ppm N

Pesticides: Conserve SC, Rate: 11 oz/100 gal. 1 time
Pageant, Rate: 12 oz/100 gal. 1 time
OHP 6672 50 WP, Rate: 11 oz/100 gal. 1 time
Xentari, Rate 1.5 lb/AC 1 time

SUMMARY and OBSERVATIONS

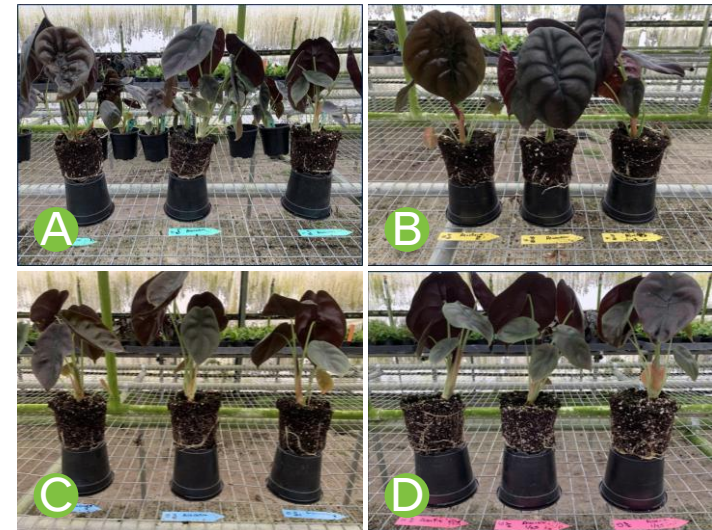
Summary: Treatment B: largest leaf size.
Treatment C: highest number of leaves.
Treatments B and C: greatest plant height, length, and width.
A, C & D: greater weight gain and higher weight composition.

Observations: Overwatering issues and algae formation were documented after a mid-demo grower transition.
Wilting was evident at final data collection, likely impacting results.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)
A	16.38	+0.9%	2.51	+22.1%
B	17.50	+7.6%	2.01	- - -
C	16.33	+0.7%	2.51	+22.1%
D	16.22	- - -	2.54	+23.3%

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).



EFFICACY REPORT

PRO-MIX® BK AGTIV AMPLIFY®

ANGELONIA

PRODUCT DEMONSTRATION: Giner Farm | Liverpool | TX

OVERVIEW

Treatments: A. Competitor product A
B. PRO-MIX® BK AGTIV AMPLIFY®

Variety: Angelonia

Dates: Start: February 20, 2025 - End: March 26, 2025

Crop Time: 5 weeks

Container Size: 4-inch cell packs

OPERATIONAL NOTES

Fertilization: Liquid fertilizer 20-10-20, 150 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B outperformed Treatment A in height and width, with plants 13% taller and 13% wider.

Observations:

Table 1. Summary of results per treatment

	WIDTH (in)	DIFFERENCE (%)	HEIGHT (in)	DIFFERENCE (%)
A	4	---	4.83	---
B	4.58	+13.5%	5.58	+14.4%



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

ASPARAGUS

PRODUCT DEMONSTRATION: Moss Hill Foliage | Apopka | FL

OVERVIEW

Treatments: A. Competitor product G
B. Competitor product H
C. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Asparagus Plumosa

Dates: Start: September 4, 2024 - End: December 4, 2024

Crop Time: 13 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Peters 20-10-20, 150-200 ppm N
Nutricote 18-6-8 180D slow-release fertilizer, initially

Pesticides: Suffoil, Rate: 1 oz/100gal. 1 time
Epishield, Rate: 5 oz/50gal. 1 time

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment A and Treatment C produced statistically larger plants, yielding higher shoot fresh weights. No differences were found in shoot dry weight or water percentage between treatments.

Observations: Plants grown in Treatment C were visibly larger until overwatering issues were reported for this treatment during the second (40 DAP) and third (54 DAP) visits. Toward the end of the demonstration, potential PGR contamination was reported, which likely impacted results.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)
A	10.30	+16.0%	2.66	+4.6%
B	8.77	- - -	2.57	+1.2%
C	10.41	+17.1%	2.54	- - -

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

ASPARAGUS

PRODUCT DEMONSTRATION: Moss Hill Foliage | Apopka | FL

OVERVIEW

Treatments: A. Competitor product I, mixed with biofungicide and mycorrhizae
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Asparagus Ming

Dates: Start: September 6, 2021 - End: January 14, 2022

Crop Time: 18 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Peters 20-10-20, 150-200 ppm N
Nutricote 18-6-8 180D slow-release fertilizer, once after 1 month of growing.

Pesticides: Avid 0.15 Ec, rate: Label 1 time
Tristar 8.5 SL, rate: Label 1 time

Growth Regulators: Not Applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B produced plants that were statistically larger, yielding higher fresh weights, dry weights, root length, and root mass.

Observations: Plants grown in Treatment B grew faster and were visually larger, greener, and exhibited more root growth.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	DRY WEIGHT (g)	ROOT LENGTH (cm)	SIZE INDEX (cm)
A	70.46	4.89	17.21	19.16
B	73.25	5.45	19.67	21.83

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).

Size Index: (Length + Perpendicular width + Height) /3



EFFICACY REPORT

PRO-MIX® BX & HP® AGTIV AMPLIFY®

ASPLENIUM NIDUS CAMPIO

PRODUCT DEMONSTRATION: Central Florida Ferns & Foliage | Zellwood | FL

OVERVIEW

Treatments: A. Competitor product D
B. Competitor product E
C. PRO-MIX® BX AGTIV AMPLIFY®
D. PRO-MIX® HP® AGTIV AMPLIFY®

Variety: Bird's Nest Champion

Dates: Start: January 24, 2023 - End: April 11, 2023

Crop Time: 11 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Weeks 1-8: 20-9-20, 100 ppm N
Weeks 9-11: 20-20-20, 150 ppm N

Pesticides: Conserve SC, Rate: 11 oz/100 gal. 1 time
Pageant, Rate: 12 oz/100 gal. 1 time
OHP 6672 50 WP, Rate: 11 oz/100 gal. 1 time
Xentari, Rate 1.5 lb/AC 1 time

SUMMARY and OBSERVATIONS

Summary: Treatment C produced plants that were statistically larger, yielding higher shoot fresh weight than other treatments.

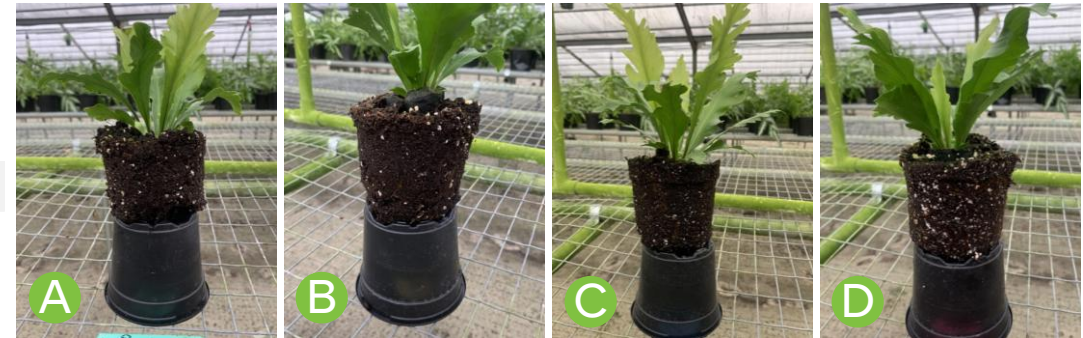
Observations: Overwatering issues and algae formation on the media surface were documented with the transition to a new grower midway through the demonstration. Issues of wilting were evident during final data collection, likely impacting results.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)	SIZE INDEX (cm)
A	8.83	+1.5%	1.11	- - -	15.58
B	8.70	- - -	1.15	+3.5%	14.71
C	10.34	+17.2%	1.39	+22.4%	16.66
D	9.02	+3.6%	1.17	+5.3%	14.71

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).

Size Index: (Length + Perpendicular width + Height) /3



Plants representing the average for each treatment.

EFFICACY REPORT

BEGONIA

PRO-MIX® BX AGTIV AMPLIFY®

PRODUCT DEMONSTRATION: Ray's Greenhouse | Telford | PA

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Begonia 'Nonstop Orange'

Dates: Start: March 17, 2021 - End: April 29, 2021

Crop Time: 6 weeks

Container Size: 5-inch pots

OPERATIONAL NOTES

Fertilization: Nutricote 14-14-14 Type 100 at planting
21-5-50 @ 150 ppm N applied weekly in final weeks 5 & 6.
Irrigation water treated with sulfuric acid.

Pesticides: Plants were treated with insecticides

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Fresh weight and dry weight increased by 55% and 47%, respectively.
Plant height was 28% greater and plant width was 30% greater.

Observations: Plants from Treatment B were visibly larger and greener.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	DRY WEIGHT (g)	HEIGHT (mm)	WIDTH (mm)
A	29.49	1.10	83.33	115.08
B	45.71	1.61	106.72	149.36

Statistical analysis was performed with Tukey HSD test ($p = 0.05$). Error bars are standard error, $n = 12$.



EFFICACY REPORT

PRO-MIX® HP® AGTIV REACH®

BOUGAINVILLEA

PRODUCT DEMONSTRATION: NS Nursery | Jacksonville | TX

OVERVIEW

Treatments: A. Competitor product B
B. PRO-MIX® HP® AGTIV REACH®

Variety: Elizabeth Angus

Dates: Start: November 6, 2024 - End: March 10, 2025

Crop Time: 4 months

Container Size: 1-gallon round pots

OPERATIONAL NOTES

Fertilization: Harrell's 17-5-17, 100 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Plants in Treatment B performed better in width, height, stem count and flower set.
Plant losses: 3 in A vs 0 in B - likely due to inconsistent root quality and watering

Observations: Plugs were rooted cuttings; root quality varied noticeably among individual plants.
Peat in Treatment A exhibited an inconsistent texture, and a noticeable number of weeds.
Treatment B had minimal weed presence.

Table 1. Summary of results per treatment

	WIDTH (in)	DIFFERENCE (%)	HEIGHT (in)	DIFFERENCE (%)	STEM COUNT
A	13.33	---	5.75	---	2.58
B	13.83	+3.9%	7.67	+28.6%	3.33



EFFICACY REPORT

BOUGAINVILLEA

PRO-MIX® HP® AGTIV REACH®

PRODUCT DEMONSTRATION: NS Nursery | Jacksonville | TX

OVERVIEW

Treatments: A. Competitor product B
B. PRO-MIX® HP® AGTIV REACH®

Variety: Pink

Dates : Start: November 6, 2024 - End: March 10, 2025

Crop Time: 4 months

Container Size: 1-gallon round pots

OPERATIONAL NOTES

Fertilization: Harrell's 17-5-17, 100 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Plants in Treatment B performed better in width, height, and stem count.
Treatment A produced 11% more flowers.
Plant losses: 2 in A vs 1 in B - likely due to inconsistent root quality and watering.

Observations: Plugs were rooted cuttings; root quality varied noticeably among individual plants.
Peat in Treatment A exhibited an inconsistent texture, and a noticeable number of weeds.
Treatment B had minimal weed presence.

Table 1. Summary of results per treatment

	WIDTH (in)	DIFFERENCE (%)	HEIGHT (in)	DIFFERENCE (%)	STEM COUNT
A	8.83	---	7	---	2.75
B	9.83	+10.7%	8.17	+15.4%	3

Results per category with same letter are not statistically different according to a Tukey HSD test ($p=0.05$).



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

CALATHEA

PRODUCT DEMONSTRATION: Wekiwa Gardens | Apopka | FL

OVERVIEW

Treatments: A. Competitor product J
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: *Calathea Roseopicata*

Dates: Start: September 18, 2024 - End: February 18, 2025

Crop Time: 22 weeks

Container Size: 6-inch pots

OPERATIONAL NOTES

Fertilization: Peters 20-10-20 liquid fertilizer, 200 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B produced plants that were statistically larger, yielding higher shoot fresh weights and shoot dry weights.

Observations: Plants in Treatment B grew more slowly at the beginning of the demonstration, but by the midpoint, they appeared larger than plants in Treatment A. By the end of the demonstration, plants in Treatment B were bigger.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)	SIZE INDEX (cm)
A	97.36	---	9.15	---	28.44
B	122.96	+22.2%	10.43	+13.1%	30.31

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).

Size Index: (Length + Perpendicular width + Height) / 3



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

CALIBRACHOA

PRODUCT DEMONSTRATION: Dan & Jerry's Greenhouse | Harrisonville | MO

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Cabaret Bright Red

Dates: Start: January 6, 2025 - End: February 26, 2025

Crop Time: 7 weeks

Container Size: 10-inch hanging baskets

OPERATIONAL NOTES

Fertilization: Florikan 12-4-11, 2 lb/yard
Liquid fertilizers 16-3-16 and 20-10-20, 150-200 ppm N
Iron chelate

Pesticides: Mainspring GNL, Talstar Professional, Overture 35 WP, Aria,
and Paylon

Growth Regulators: Dazide 85 WSG, B-NINE WSG, Florel, and Cycocel

SUMMARY and OBSERVATIONS

Summary: Treatment B outperformed Treatment A in height and width, with plants 15% taller and 6% wider.

Observations: N/A

Table 1. Summary of results per treatment

	WIDTH (in)	DIFFERENCE (%)	HEIGHT (in)	DIFFERENCE (%)
A	15.25	---	5.5	---
B	16.25	+6.3%	6.5	+16.7%



EFFICACY REPORT

PRO-MIX® BK AGTIV REACH®

CALIBRACHOA

PRODUCT DEMONSTRATION: Flintwood Farms | Fayetteville | GA

OVERVIEW

Treatments: A. PRO-MIX® BK
B. PRO-MIX® BK AGTIV REACH®

Variety: Calibrachoa

Dates: Start: March 18, 2022 - End: May 4, 2022

Crop Time: 6 weeks

Container Size: 10-inch hanging baskets

OPERATIONAL NOTES

Fertilization: Plant Marvel 16-3-16, 100 ppm N, for 4 weeks
Peters 20-10-20, 150 ppm N, for the final 10 days.

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B produced plants that were statistically larger, yielding higher shoot fresh weights, longer roots, and more flowers on average than plants in treatment A.

Observations: Plants in Treatment B were visually larger, greener and yielded more flowers.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	SHOOT DRY WEIGHT (g)	ROOT LENGTH (cm)	FLOWER AVG.	SIZE INDEX (cm)
A	58.17	4.71	17.96	23.30	31.74
B	74.10	6.34	19.07	46.25	37.02

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).
Size Index: (Length + Perpendicular width + Height) /3



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

CALIBRACHOA

PRODUCT DEMONSTRATION: Ray's Greenhouse | Telford | PA

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Calibrachoa 'Callie Rose'

Dates: Start: March 15, 2021 - End: April 29, 2021

Crop Time: 6.5 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Nutricote 14-14-14 Type 100 at planting
21-5-50 @ 150 ppm N applied weekly in final weeks 5 & 6.
Irrigation water treated with sulfuric acid.

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Significant increase of fresh weight, 56%, dry weight, 50%, flower number, 53%.
Plant height was 29% greater, and plant width was 23% greater.
All differences were statistically significant.

Observations: Plants grown in Treatment B were visually larger and slightly darker green.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	DRY WEIGHT (g)	FLOWERS (quantity)	HEIGHT (mm)	WIDTH (mm)
A	10.25	1.53	8	79	141.53
B	15.396	2.30	12	95	173.6

Statistical analysis was performed with Tukey HSD test ($p = 0.05$). Error bars are standard error, $n = 15$.



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

COFFEE

PRODUCT DEMONSTRATION: Moss Hill Foliage | Apopka | FL

OVERVIEW

Treatments: A. Competitor product G
B. Competitor product H
C. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Coffee Arabica

Dates: Start: September 4, 2024 - End: December 4, 2024

Crop Time: 13 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Peters 20-10-20 liquid fertilizer, 150-200 ppm N
Nutricote 18-6-8 180D slow-release fertilizer, once

Pesticides: Suffoil, Rate: 1 oz/100 gal. 1 time
Epishield, Rate: 5 oz/50 gal. 1 time

Growth Regulators: Dazide, Rate, 4 oz/10 gal. 2 sprays

SUMMARY and OBSERVATIONS

Summary: Statistical analysis indicated no significant differences between media types for any tracked variables, including size index, shoot fresh weight, shoot dry weight, and shoot water percentage.

Observations: Plants were observed to be of similar sizes between treatments.

Overwatering issues were reported for Treatment C during the second (40 DAP) and third (54 DAP) visits, which likely impacted results.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)
A	12.87	+4.9%	2.91	+3.5%
B	12.26	- - -	2.81	- - -
C	12.32	+0.5%	2.92	+3.8%

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).



EFFICACY REPORT

COFFEE

PRO-MIX® BX AGTIV AMPLIFY®

PRODUCT DEMONSTRATION: Moss Hill Foliage | Apopka | FL

OVERVIEW

Treatments: A. Competitor product I, mixed with biofungicide and mycorrhizae
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Coffee Arabica

Dates: Start: September 6, 2021 – End: November 18, 2021

Crop Time: 10 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Peters 20-10-20 water-soluble fertilizer, 150-200 ppm N
Nutricote 18-6-8 180D slow-release fertilizer, once after 1 month of growing

Pesticides: Avid 0.15 Ec, rate: Label 1 time
Tristar 8.5 SL, rate: Label 1 time

Growth Regulators: B-Nine, Rate 5 ppm, 1 time

SUMMARY and OBSERVATIONS

Summary: Treatment B produced plants that were statistically larger, yielding higher fresh weights, dry weights, root length, and root mass.

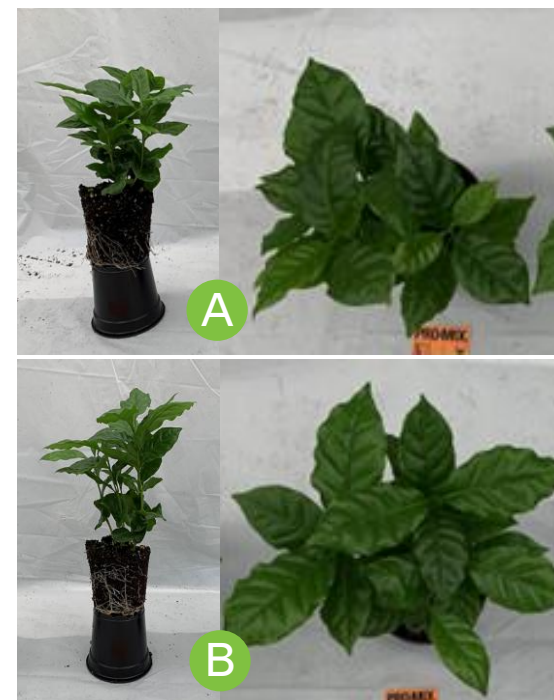
Observations: Plants grown in Treatment B grew faster and were visually larger and greener.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	DRY WEIGHT (g)	ROOT LENGTH (cm)	SIZE INDEX (cm)
A	20.63	2.48	15.76	16.69
B	23.68	2.80	16.19	17.53

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).

Size Index: (Length + Perpendicular width + Height) /3



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

DIEFFENBACHIA

PRODUCT DEMONSTRATION: Wekiwa Gardens | Apopka | FL

OVERVIEW

Treatments: A. Competitor product J
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: *Dieffenbachia Sequine* 'Tropic Machine'

Dates: Start: September 18, 2024 - End: February 18, 2025

Crop Time: 22 weeks

Container Size: 6-inch pots

OPERATIONAL NOTES

Fertilization: Peters 20-10-20 liquid fertilizer, 200 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B produced plants that were statistically larger, yielding higher shoot fresh weights and shoot dry weights.

Observations: Plants grown in Treatment B were visibly larger and bigger.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)	SIZE INDEX (cm)
A	101.31	---	8.52	---	33.04
B	109.93	+8.2%	11.32	+28.2%	34.87

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).

Size Index: (Length + Perpendicular width + Height) /3



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

FUCHSIA

PRODUCT DEMONSTRATION: Frank's Produce & Greenhouse | Elkridge | MD

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Fuchsia SPP.X Dark Eyes

Dates: Start: January 26, 2024 - End: April 23, 2024

Crop Time: 12 weeks

Container Size: 10-inch hanging baskets

OPERATIONAL NOTES

Fertilization: Jacks Professional 15-15-15, 150-200 ppm
Nutricote 180D slow-release fertilizer, once at the start of the demonstration

Pesticides: Altus Liquid drench, Rate 3 oz/100 gal. 1 time

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B produced plants that were statistically larger for the first 49 days after planting (DAP). These plants yielded higher shoot fresh weights and produced more flowers on average than treatment A.

Observations: Plants grown in Treatment B were visually bigger, greener and yielded larger leaves and more flowers.

Table 1. Summary of results per treatment

	LENGTH (cm)	WIDTH (cm)	HEIGHT (cm)	SIZE INDEX (cm)	FLOWER AVG.
A	60.88	58.33	31.02	50.07	9.32
B	63.55	60.81	32.33	52.23	16.94

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).
Size Index: (Length + Perpendicular width + Height) /3



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

GERANIUM

PRODUCT DEMONSTRATION: Ray's Greenhouse | Telford | PA

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Geranium 'Americana Orchid'

Dates: Start: March 18, 2021 - End: April 29, 2021

Crop Time: 6 weeks

Container Size: 6-inch pots

OPERATIONAL NOTES

Fertilization: Nutricote 14-14-14 Type 100 at planting
21-5-50, 150 ppm N applied weekly in final weeks 5 & 6.
Irrigation water treated with sulfuric acid.

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Fresh weight and dry weight were noticeably greater by 17% and 10%, respectively in Treatment B.

Observations: Geraniums grown in Treatment B were darker with slightly more root development than those grown in Treatment A. No visual differences in plant size.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	INCREASE (%)	DRY WEIGHT (g)	INCREASE (%)
A	37.14	---	3.99	---
B	43.38	+15.5%	4.4	+9.8%



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

GERANIUM & ASPARAGUS

PRODUCT DEMONSTRATION: Dan & Jerry's Greenhouse | Harrisonville | MO

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Combination baskets

Dates: Start: January 6, 2025 - End: February 26, 2025

Crop Time: 7 weeks

Container Size: 10-inch hanging baskets

OPERATIONAL NOTES

Fertilization: Florikan 12-4-11, 2 lb/yard
Liquid fertilizers 16-3-16 and 20-10-20, 150-200 ppm N
Iron chelate

Pesticides: Mainspring GNL, Talstar Professional, Overture 35 WP, Aria, Paylon

Growth Regulators: Dazide 85 WSG, B-NINE WSG, Florel, and Cycocel

SUMMARY and OBSERVATIONS

Summary: The combination baskets in Treatment B were 2% taller and flowers are 19% greater than Treatment A.

Observations: N/A

Table 1. Summary of results per treatment

	WIDTH (in)	HEIGHT (in)	FLOWER SET Avg Qty	DIFFERENCE (%)
A	15.83	7.92	3.12	
B	15.83	8.08	3.83	+20.4%



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

MONSTERA DELICIOSA

PRODUCT DEMONSTRATION: Moss Hill Foliage | Apopka | FL

OVERVIEW

Treatments: A. Competitor product G
B. Competitor product H
C. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Monstera Deliciosa

Dates: Start: September 4, 2024 - End: October 28, 2024

Crop Time: 7 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Peters 20-10-20 liquid fertilizer, 150-200 ppm N
Nutricote 18-6-8 180D slow-release fertilizer, once

Pesticides: Suffoil, Rate: 1 oz/100 gal. 1 time
Epishield, Rate: 5 oz/50 gal. 1 time

Growth Regulators: Piccolo 10xc, Rate, 50 mL/1 gal. 2 times

SUMMARY and OBSERVATIONS

Summary: Treatment C produced plants that were statistically larger for the first 20 DAP. Treatment B and C produced plants that were statistically larger, yielding higher shoot fresh weights and shoot dry weights.

Observations: Plants grown in Treatment C were visibly larger until overwatering issues were reported on the second visit (40 DAP), which likely impacted results.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)
A	25.77	+0.4%	1.68	- - -
B	25.67	- - -	2.00	+17.4%
C	27.94	+8.1%	2.03	+18.9%

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

NEW GUINEA IMPATIENS

PRODUCT DEMONSTRATION: Frank's Produce & Greenhouse | Elkridge | MD

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: (Impatiens Hybrida) SunPatiens 'Compact Orange'

Dates: Start: January 26, 2024 - End: April 23, 2024

Crop Time: 12 weeks

Container Size: 10-inch hanging baskets

OPERATIONAL NOTES

Fertilization: Jacks Professional 15-15-15, 150-200 ppm
Nutricote 180D slow-release fertilizer, once at the start of the demonstration

Pesticides: Altus Liquid drench, Rate 3 oz/100 gal. 1 time

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B produced plants that were statistically larger for the first 49 days after planting (DAP). Demo ended early as plants were prematurely sold due to consumer demand:

- 10 out of 12 plants from Treatment B
- 4 out of 12 plants from Treatment A

Observations: Plants in Treatment B were visually bigger, greener and yielded more flowers.

Table 1. Summary of results per treatment

	LENGTH (cm)	WIDTH (cm)	HEIGHT (cm)	SIZE INDEX (cm)
A	41.63	38.63	13.35	31.21
B	42.54	39.96	14.88	32.46

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).

Size Index: (Length + Perpendicular width + Height) /3

***No picture available**

Plants in the PRO-MIX® BX AGTIV AMPLIFY treatment were of better quality and sold off before final data or pictures could be taken.

These plants were the best-performing treatment in this product demonstration.

EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

NEW GUINEA IMPATIENS

PRODUCT DEMONSTRATION: Maryland Flowers | White Marsh | MD

OVERVIEW

Treatments: A. Competitor product F
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: *Impatiens Hawkeri* Celebrate Pink

Dates: Start: January 26, 2024 - End: April 23, 2024

Crop Time: 12 weeks

Container Size: 5-inch pots

OPERATIONAL NOTES

Fertilization: Master blend 20-10-20 liquid feed, 150-200 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Plants in Treatment B had a higher fresh and shoot dry weight. Statistical analysis confirmed that size index of plants in Treatment B is larger than those from Treatment A.

Observations: Plants in Treatment B were visually larger and greener.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	DIFFERENCE (%)	DRY WEIGHT (g)	DIFFERENCE (%)
A	84.15	---	3.60	---
B	128.43	+41.7%	4.32	+18.2%

Results per category with same letter are not statistically different according to a Tukey HSD test ($p=0.05$).



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

NEW GUINEA IMPATIENS

PRODUCT DEMONSTRATION: Maryland Flowers | White Marsh | MD

OVERVIEW

Treatments: A. Competitor product F
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: (Impatiens Hybrida) SunPatiens 'Compact Deep Red'

Dates: Start: January 26, 2024 - End: April 23, 2024

Crop Time: 12 weeks

Container Size: 5-inch pots

OPERATIONAL NOTES

Fertilization: Master blend 20-10-20 liquid feed, 150-200 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Plants in Treatment B had a higher fresh and shoot dry weight. Statistical analysis confirmed that size index of plants in Treatment B is larger than plants from Treatment A.

Observations: Plants in Treatment B were visually larger, greener and exhibited a higher root length.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	DIFFERENCE (%)	DRY WEIGHT (g)	DIFFERENCE (%)
A	99.19	---	4.05	---
B	127.49	+25.0%	4.63	+13.4%

Results per category with same letter are not statistically different according to a Tukey HSD test ($p \leq 0.05$).



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

NEW GUINEA IMPATIENS

PRODUCT DEMONSTRATION: Ray's Greenhouse | Telford | PA

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: New Guinea Impatiens 'Super Sonic Hot Pink'

Dates: Start: March 10, 2021 – End: April 29, 2021

Crop Time: 7 weeks

Container Size: 5-inch pots

OPERATIONAL NOTES

Fertilization: Nutricote 14-14-14 Type 100 at planting
21-5-50 @ 150 ppm N applied weekly in final weeks 5 & 6.
Irrigation water treated with sulfuric acid.

Pesticides: Plants were treated with insecticides and foliar fungicides.

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Fresh and dry weights were significantly greater by 58% and 39%, respectively.
Plant height and width were statistically greater by 12%.

Observations: Plants grown in Treatment B were visually taller, wider and darker green.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	DRY WEIGHT (g)	HEIGHT (mm)	WIDTH (mm)
A	18.86	1.80	128.33	162.25
B	29.88	2.51	144.25	182.08

Statistical analysis was performed with Tukey HSD test ($p = 0.05$). Error bars are standard error, $n = 12$.



EFFICACY REPORT

PRO-MIX® BK AGTIV AMPLIFY®

PETUNIA

PRODUCT DEMONSTRATION: Giner Farm | Liverpool | TX

OVERVIEW

Treatments: A. Competitor product A
B. PRO-MIX® BK AGTIV AMPLIFY®

Variety: Dream Petunia

Dates: Start: February 20, 2025 - End: March 26, 2025

Crop Time: 5 weeks

Container Size: 4-inch cell packs

OPERATIONAL NOTES

Fertilization: Liquid fertilizer 20-10-20, 150 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

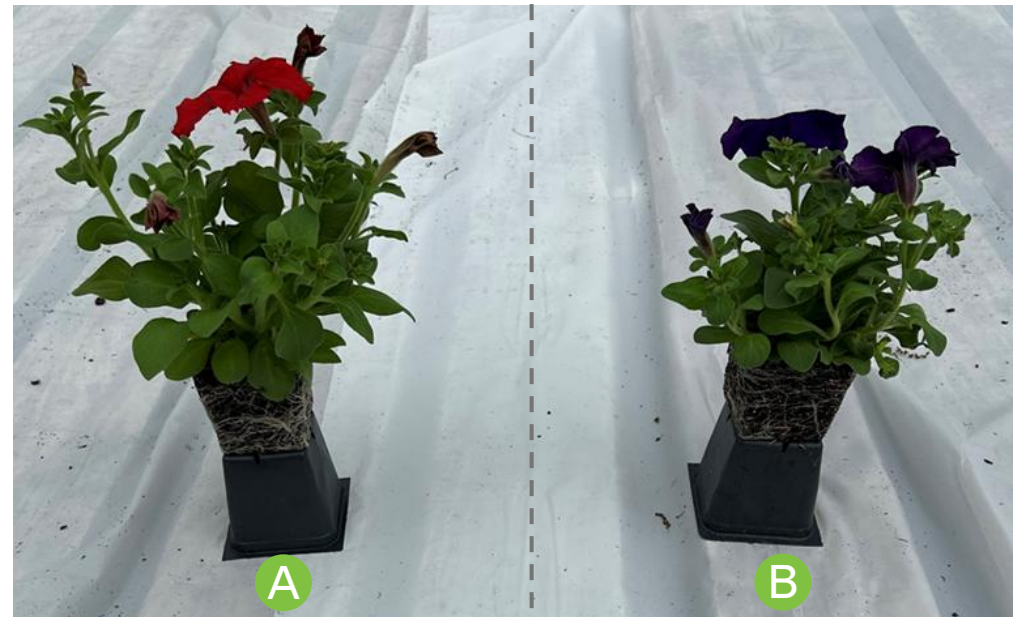
SUMMARY and OBSERVATIONS

Summary: Treatment B outperformed Treatment A in height and width, with 6% taller and 5% wider plants.

Observations: Both treatments produced the same average number of flowers.

Table 1. Summary of results per treatment

	WIDTH (in)	DIFFERENCE (%)	HEIGHT (in)	DIFFERENCE (%)	FLOWER SET
A	9.75	- - -	5.92	- - -	1.83
B	10.25	+5.1%	6.33	+6.9%	1.83



EFFICACY REPORT

PETUNIA

PRO-MIX® BX AGTIV AMPLIFY®

PRODUCT DEMONSTRATION: Dan & Jerry's Greenhouse | Harrisonville | MO

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Easy Wave Blue

Dates: Start: January 6, 2025 - End: February 26, 2025

Crop Time: 7 weeks

Container Size: 10-inch hanging baskets

OPERATIONAL NOTES

Fertilization: Florikan 12-4-11, 2 lb/yard
Liquid fertilizers 16-3-16 and 20-10-20, 150-200 ppm N
Iron chelate

Pesticides: Mainspring GNL, Talstar Professional, Overture 35 WP, Aria, Paylon

Growth Regulators: Dazide 85 WSG, B-NINE WSG, Florel, and Cycocel

SUMMARY and OBSERVATIONS

Summary: Treatment B outperformed Treatment A in height and width, with plants 21% taller and 6% wider.

Observations:

Table 1. Summary of results per treatment

	WIDTH (in)	DIFFERENCE (%)	HEIGHT (in)	DIFFERENCE (%)
A	14.25	---	4.67	---
B	15.67	+9.5%	5.9	+23.3%



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

PETUNIA

PRODUCT DEMONSTRATION: Ray's Greenhouse | Telford | PA

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Petunia 'Amore Queen of Hearts'

Dates: Start: March 24, 2021 - End: April 29, 2021

Crop Time: 5 weeks

Container Size: 4-inch pots

OPERATIONAL NOTES

Fertilization: Nutricote 14-14-14 Type 100 at planting
21-5-50 @ 150 ppm N applied weekly in final weeks 5 & 6.
Irrigation water treated with sulfuric acid.

Pesticides: Plants were treated with insecticides and foliar fungicides.

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Fresh weight and dry weight were significantly greater by 29.7% and 34.4%, respectively.
Flower numbers were not significantly different.

Observations: Plants grown in Treatment B were darker green.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	INCREASE (%)	DRY WEIGHT (g)	INCREASE (%)
A	19.25	---	1.83	---
B	24.97	+29.7%	2.46	+34.4%

Statistical analysis was performed with Tukey HSD test ($p = 0.05$). Error bars are standard error, $n = 15$.



EFFICACY REPORT

PRO-MIX® BK & HP® AGTIV REACH®

POINSETTIA

PRODUCT DEMONSTRATION: Davis Floria Co. | Dewy Rose | GA

OVERVIEW

Treatments: A. Competitor product L
B. PRO-MIX® HP® AGTIV REACH®
C. PRO-MIX® BK AGTIV REACH®

Variety: Poinsettia Prestigious

Dates: Start: July 29, 2025 - End: November 21, 2025

Crop Time: 16 weeks

Container Size: 8-inch pots

OPERATIONAL NOTES

Fertilization: 14-4-14 + Molybdenum
18-6-18 + Molybdenum
Calcium chloride spray

Pesticides: Eretmocelus , Rate: Normal, 5 times
Trichosol, Rate: Label, 1 time
Python 35, Rate: Label, 1 time

Growth Regulators: Bonzi, Rate: 2ppm, 1 time

SUMMARY and OBSERVATIONS

Summary: Treatment A and B plants were statistically larger than Treatment C through 62 DAP; end-of-cycle differences were not statistically significant. Treatment B had the highest shoot fresh and dry weights.

Observations: Treatment A and B were visibly larger throughout the demo. Treatment B plants were the largest and had the best root growth. Overwatering may have impacted Treatment C.

Table 1. Summary of results per treatment

	SHOOT FRESH WEIGHT (g)	DIFFERENCE (%)	SHOOT DRY WEIGHT (g)	DIFFERENCE (%)
A	448.66	+16.3%	60.81	+9.2%
B	457.83	+18.7%	69.94	+25.9%
C	385.67	---	55.52	---

Statistical analysis of treatments according to a sigma restricted ANOVA and a protected LSD test ($\alpha=0.05$).



EFFICACY REPORT

PRO-MIX® HP AGTIV AMPLIFY®

POINSETTIA

PRODUCT DEMONSTRATION: Jolly Farmer | NB

OVERVIEW

Treatments: A. Competitor product K
B. PRO-MIX® HP AGTIV AMPLIFY®

Variety: Poinsettia 'Christmas Spirit'

Dates: Start: July 18, 2022 - End: October 18, 2022

Crop Time: 16 weeks

Container Size:

OPERATIONAL NOTES

Fertilization: Blackmore 15-5-15: Rate 200 ppm / constant feed

Pesticides: Insecticidal Soap for fungus gnat control

Growth Regulators: B-Nine and Cycocel, low rate.
Targeted height above 13 -17 inches at end of growth.

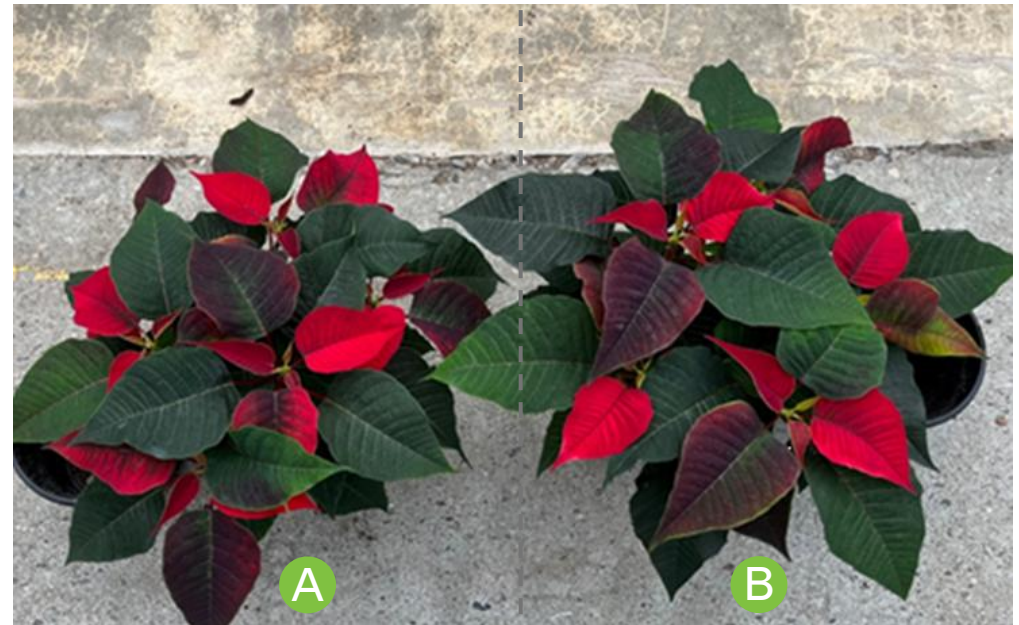
SUMMARY and OBSERVATIONS

Summary: Poinsettia grown in Treatment B had 5% increase in plant height compared to Treatment A.

Observations: N/A

Table 1. Summary of results per treatment

	HEIGHT (in)
A	12
B	13



EFFICACY REPORT

PRO-MIX® BK AGTIV AMPLIFY®

PRODUCT DEMONSTRATION: Giner Farm | Liverpool | TX

OVERVIEW

Treatments: A. Competitor product A
B. PRO-MIX® BK AGTIV AMPLIFY®

Variety: Cora XDR

Dates: Start: February 20, 2025 - End: March 26, 2025

Crop Time: 5 weeks

Container Size: 4-inch cell packs

OPERATIONAL NOTES

Fertilization: Liquid fertilizer 20-10-20, 150 ppm N

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B outperformed Treatment A in height and width, with plants 11% taller and 10% wider.

Observations:

Table 1. Summary of results per treatment

	WIDTH (in)	DIFFERENCE (%)	HEIGHT (in)	DIFFERENCE (%)
A	5.17	---	4.17	---
B	5.75	+10.6%	4.67	+11.3%



EFFICACY REPORT

VINCA

PRO-MIX® BX & PRO-MIX® HP®

PRODUCT DEMONSTRATION: Spring Garden Nursery | Spring | TX

OVERVIEW

Treatments:

- A. Competitor product C
- B. PRO-MIX® BX
- C. PRO-MIX® BX AGTIV REACH®
- D. PRO-MIX® BX AGTIV AMPLIFY®
- E. PRO-MIX® HP® AGTIV REACH®

Variety: Vinca XDR Cora

Dates: Start: February 29, 2024 - End: April 4, 2024

Crop Time: 4 weeks

Container Size: 4-inch square on 18 plant flats

OPERATIONAL NOTES

Fertilization: Jack's 15-15-15, 150 ppm N
Microlife Max 3-8-3, 2 fl oz/gal.
Microlife Super Seaweed 0-0-0.03, 2 fl oz/gal.

Pesticides: Not applicable

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment A produced the healthiest and largest plants. Treatment B had the second healthiest and largest plants. Plants in other treatments appeared stunted.

Observations: Potential causes of stunting include insufficient watering and greater wind/sun exposure, as these groups were closer to the edge of the greenhouse.

Table 1. Summary of results per treatment

	WIDTH (cm)	HEIGHT (cm)	DRY WEIGHT (g)
A	10	14	0.75
B	11	10	0.46
C	5	9	0.34
D	6	9	0.38
E	7	10	0.44



EFFICACY REPORT

PRO-MIX® BX AGTIV AMPLIFY®

VINCA

PRODUCT DEMONSTRATION: Ray's Greenhouse | Telford | PA

OVERVIEW

Treatments: A. PRO-MIX® BX
B. PRO-MIX® BX AGTIV AMPLIFY®

Variety: Vinca 'Titan Polka Dot'

Dates: Start: March 22, 2021 - End: April 29, 2021

Crop Time: 5.5 weeks

Container Size: 1206 cell packs

OPERATIONAL NOTES

Fertilization: Sulfuric acid treated water, 150 ppm N 21-5-20 applied weekly, once per week.

Pesticides: Insecticides and foliar fungicides

Growth Regulators: Not applicable

SUMMARY and OBSERVATIONS

Summary: Treatment B:
Fresh weight was 23% greater and dry weight was 8% greater, but results were not statistically significant. Plant height was significantly greater by 16%.

Observations: Plants grown in Treatment B were visually taller and darker green.

Table 1. Summary of results per treatment

	FRESH WEIGHT (g)	DRY WEIGHT (g)	HEIGHT (mm)
A	2.81	0.50	83.44
B	3.47	0.54	95.94

Statistical analysis was performed with Tukey HSD test ($p = 0.05$). Error bars are standard error, $n = 16$.



EFFICACY REPORT

CONTACT OUR DEDICATED TEAM TODAY.
WE CARE ABOUT YOUR SUCCESS!



PEOPLE AND TECHNOLOGIES MAKING A DIFFERENCE

At Premier Tech, we are all about making a difference by connecting People and Technologies for more than 100 years. One team driven by a shared will to deliver sustainable solutions that help feed, protect and improve our world. Premier Tech has a wide range of products, services, brands, and technologies allowing to increase crop yields, bring beautiful gardens to life, automate the handling and packaging operations of many manufacturing facilities, treat and recycle water, support companies in their digital transformation, and offer bio-ingredients for the well-being of humans and animals.



PT Growers and Consumers

World Headquarters
1 avenue Premier
Campus Premier Tech
Rivière-du-Loup (Québec)
G5R 6C1 CANADA



PTHORTICULTURE.COM

CUSTOMER SERVICE: **1 800 667-5366**
GROWER SERVICES: **1 800 424-2554**
services@pthorticulture.com