

## OBJECTIVE

To assess the total yield and crop quality response for bell pepper when three applications of Fertileader Elite starting at first bloom in 14 day intervals.

**Site Location:**  
South Carolina

**Researcher:**  
Independent Grower Study

## KEY FINDINGS

# 218.6 box/ac

Increase In Total Marketable Boxes of Bell Pepper

# 10.2%

More Boxes of Premium Categories (JBO,XL) Bell Pepper

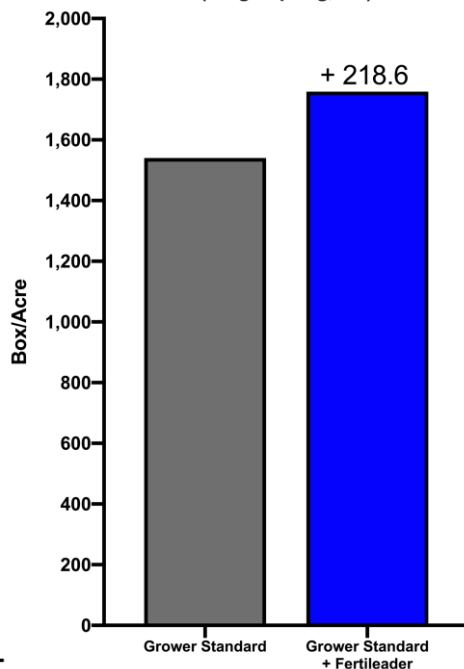
# \$3,588/ac

Return on Investment with Fertileader added to GS program

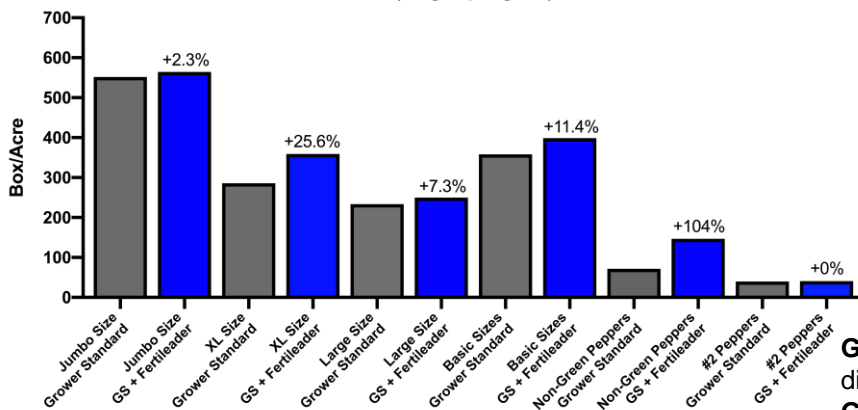
## TIMAC AGRO PRODUCT



Total Marketable Boxes of Bell Pepper (Ridge Spring, SC)



Treatment Impact on Bell Pepper Yield & Quality (Ridge Spring, SC)



**Graph (Left):** Treatment impact on category distribution based on increase by percentages.  
**Graph (Above):** Treatment impact on total number of marketable boxes of bell pepper.

## APPLICATION

Treatment	Application Rate
Grower Standard	N/A
Grower Standard with Fertileader Elite	40 oz/Ac, 3x 14 Day Intervals, Starting at First Bloom (5/14, 5/28, 6/11)

## MATERIALS AND METHODS

This study was conducted on a commercial grower's farm with a uniform, clay loam soil near Ridge Spring, SC. The experimental design was a split farm consisting of two uniform blocks of similar acreage and soil types separated by a road-way on the same property. Variety maturity date, irrigation scheduling, fertility protocols and all integrated pest management cover sprays were all equal between the two blocks. Bell pepper varieties 'Aristotle', 'Boca', and 'Vanguard' were transplanted on April 8 and harvest was conducted between June 20 and July 22. Treatment of Fertileader Elite was applied at 40 oz/acre, three times (May 14, May 28 and June 11) to coincide with standard IPM cover spray routine and was initiated at first bloom. The subsequent treatment sprays continued at 14-day intervals. Harvest data was collected and totaled from commercial pack-out tracking software throughout the season. Weather for the spring growing season was consistent with 5-year averages for daily temperatures and slightly higher than 5-year averages for rainfall.

## RESULTS AND CONCLUSIONS

The Fertileader Elite treatment (3x @ 40 oz/acre) resulted in 218.6 more marketable boxes per acre harvested over the spring growing season. The treatment yielded statistical increases in every box sizing category except for the #2 peppers with roughly the same amount of boxes per acre (40). Premium category bell peppers (Jumbo and X-Large) saw a combined increase of 10.2% with the Fertileader treatment. Large, Basic (Medium and Select) and Non-Green (Suntan, Red, Mixed Red) box categories saw increases of 7.3%, 11.4%, and 104%, respectively. Considering market averages of wholesale box prices (Atlanta Terminal, USDA Market Report, 7/22/20) factored with contracted grower prices for categories not priced within the report and the cost of the treatment (\$50 per acre), the Fertileader treatment returned \$3,588 per acre.

## MARKET ECONOMICS & RETURN ON INVESTMENT

Prices used to generate gross revenue and economic return for the study were based on 7/22/20 (date of last harvest) Atlanta Terminal Wholesale prices from the USDA Market Report "low average". For categories that were not featured in the Market Report, numbers were adjusted by percentage on the range of contracted prices specific box categories according to grower.

	Grower Std.	Grower Std.	GS + Elite (3X)	GS + Elite (3X)
Box Sizing Category	Box/Ac	Gross Rev.	Box/Ac	Gross Rev.
JBO 1 1/9	489.2	\$9,784	512.6	\$10,252
JBO (36) 1 1/9	22.9	\$458	41.5	\$830
DRC JBO (48)	39.5	\$948	10.2	\$244.80
XL 1 1/9	285.8	\$5,716	358.9	\$7,178
LRG 1 1/9	233.4	\$4,201.20	249.8	\$4,496.40
MED 1 1/9	126.6	\$1,899	117.6	\$1,764
SELECT 1 1/9	231.4	\$3,471	281.2	\$4,218
SUNTAN 1 1/9	66.5	\$997.50	137.2	\$2,058
RED 1 1/9	0.7	\$10.50	0.4	\$6
MIX RED 1 1/9	4.6	\$69	9.2	\$138
#2 1 1/9	40	\$480	40.6	\$487.20
<b>TOTAL</b>	<b>1540.6</b>	<b>\$28,034</b>	<b>1759.2</b>	<b>\$31,672</b>
		Rev. Change over GS		<b>\$3,638</b>
		(-) Cost of Program		<b>\$50</b>
		(=) Return on Investment		<b>\$3,588</b>

	Prices/Box
JBO/JBO (36) 1 1/9	\$20
JBO (48) DRC	\$24
X-LARGE 1 1/9	\$20
Large 1 1/9	\$18
Medium/Select 1 1/9	\$15
Suntan/Red/Mix 1 1/9	\$15
#2	\$12

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