



QUEVEDO STATE TECHNICAL UNIVERSITY

FACULTY OF AGRICULTURAL SCIENCES
AGRICULTURAL ENGINEERING CAREER

Title of the Preliminary Research Project: Evaluation of the Crop Booster device in the cultivation of pepper (*Capsicum annum*) under micro-sprinkler irrigation conditions

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FIRST HARVEST DATA 12/27/2021

VARIETY (WONDER) CB TREATMENT			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	6.0	4.5	74.3
two	7.5	4.5	96.8
3	5.1	4.8	83.1
4	7.3	4.3	83.4
5	5.6	4.2	56.7

VARIETY (WONDER) WITNESS			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	5.1	3.5	45.2
two	5.9	3.6	52.6
3	6.0	3.2	39.9
4	6.1	3.5	53.2
5	6.0	3.4	47.4

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
74.3	45.2	29.10	64.38
96.8	52.6	44.20	84.03
83.1	39.9	43.20	108.27
83.4	53.2	30.20	56.77
56.7	47.4	9.30	19.62
TOTAL	394.3	156.00	65.46

VARIETY (WONDER) CROP BOOSTER R1			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	5.9	4.5	74.3
two	6.5	4.8	96.5
3	7.1	4.3	83.4
4	6.5	4.5	59.8
5	5.4	4.5	62.1

VARIETY (WONDER) WITNESS R1			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	6.0	4.0	39.5
two	5.2	3.5	39.8
3	5.0	3.0	39.7
4	4.2	3.8	39.9
5	4.0	3.7	39.6

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
74.3	39.5	34.80	88.10
96.5	39.8	56.70	142.46
83.4	39.7	43.70	110.08
59.8	39.9	19.90	49.87
62.1	39.6	22.50	56.82
TOTAL	376.1	177.60	89.47

VARIETY (WONDER) CROP BOOSTER R2			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	6.8	4.9	55.5
two	6.5	4.6	56.8
3	6.2	4.7	56.2
4	5.9	4.9	56.1
5	4.9	4.2	54

VARIETY (WONDER) WITNESS R2			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	4.9	3.5	39.5
two	4.3	3.5	39.3
3	4.0	3.1	38.1
4	5.1	3.8	36.5
5	5.0	3.6	39.9

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
55.5	39.5	16.00	40.51
56.8	39.3	17.50	44.53
56.2	38.1	18.10	47.51
56.1	36.5	19.60	53.70
54	39.9	14.10	35.34
TOTAL	278.6	85.30	44.13

VARIETY (WONDER) CROP BOOSTER R3			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	6.0	5.0	55.5
two	5.9	4.9	54.1
3	6.3	4.7	62.1
4	5.8	4.0	62.8
5	6.5	5.2	62.4

VARIETY (WONDER) WITNESS R3			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	4.0	3.9	40.1
two	4.5	4.0	40.7
3	4.7	3.6	50.9
4	4.3	3.5	51.8
5	5.0	3.9	39.7

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
55.5	40.1	15.40	38.40
54.1	40.7	13.40	32.92
62.1	50.9	11.20	22.00
62.8	51.8	11.00	21.24
62.4	39.7	22.70	57.18
TOTAL	296.9	223.2	33.02

VARIETY (MARCONI) CROP BOOSTER			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	8.0	4	74.3
two	7.5	4.5	60.5
3	10	3.5	52.7
4	9.5	5.0	72.2
5	10.5	3.7	63.5

VARIETY (MARCONI) CONTROL			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	8.0	3.5	50.9
two	7.5	3.5	54.3
3	8.4	3.5	50.1
4	8.8	3.2	54.2
5	8.3	3.3	54.5

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
74.3	50.9	23.40	45.97
60.5	54.3	6.20	11.42
52.7	50.1	2.60	5.19
72.2	54.2	18.00	33.21
63.5	54.5	9.00	16.51
TOTAL	264	59.20	22.42

VARIETY (MARCONI) CROP BOOSTER R1			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	7.8	4.0	74.8
two	7.6	4.4	72.1
3	8.0	5.1	60.8
4	10.1	5.2	65.4
5	9.8	4.9	74.5

VARIETY (MARCONI) CONTROL R1			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	9.2	4.0	74.8
two	8.6	4.4	72.1
3	8.0	5.1	60.8
4	9.0	5.2	65.4
5	9.5	4.9	74.5

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
74.8	74.8	0.00	0.00
72.1	72.1	0.00	0.00
60.8	60.8	0.00	0.00
65.4	65.4	0.00	0.00
74.5	74.5	0.00	0.00
TOTAL	347.6	0.00	0.00

VARIETY (MARCONI) CROP BOOSTER R2			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	10.2	5.0	74.3
two	10.1	5.2	70.5
3	8.1	5.0	60.8
4	8.3	5.1	74
5	9.5	5.3	68.9

VARIETY (MARCONI) CONTROL R2			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	9.0	4.0	74.2
two	8.5	4.2	73.1
3	8.2	4.8	69.8
4	8.4	5.0	66.5
5	9.0	5.0	74.0

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
74.3	74.2	0.10	0.13
70.5	73.1	-2.60	-3.56
60.8	69.8	-9.00	-12.89
74	66.5	7.50	11.28
68.9	74.0	-5.10	-6.89
TOTAL	348.5	-9.10	-2.54

VARIETY (MARCONI) CROP BOOSTER R2			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	9.0	3.2	50.9
two	10.0	3.2	54.3
3	9.0	3.5	61.4
4	9.1	3.3	44.1
5	9.0	3.2	40.0

VARIETY (MARCONI) CONTROL R3			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	9.0	4.0	74.2
two	8.5	4.2	73.1
3	8.2	4.8	69.8
4	8.4	5.0	66.5
5	9.0	5.0	74.0

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
50.9	74.2	-23.30	-31.40
54.3	73.1	-18.80	-25.72
61.4	69.8	-8.40	-12.03
44.1	66.5	-22.40	-33.68
40.0	74.0	-34.00	-45.95
TOTAL	250.7	-106.90	-29.89

VARIETY (CUBANELLE) CROP BOOSTER			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	11.0	3.4	50.1
two	10.0	3.5	49.9
3	10.0	3.0	52.7
4	9.5	2.9	48.3
5	10.5	3.0	50.0

VARIETY (CUBANELLE) CONTROL			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	7.0	2.3	31.3
two	7.5	2.3	38.3
3	7.0	2.3	38.6
4	7.5	2.5	39.0
5	6.0	2.2	31.0

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
50.1	31.3	18.80	60.06
49.9	38.3	11.60	30.29
52.7	38.6	14.10	36.53
48.3	39.0	9.30	23.85
50.0	31.0	19.00	61.29
TOTAL	251	72.80	40.85

VARIETY (CUBANELLE) CROP BOOSTER R1			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	9.6	2.9	43.2
two	9.8	2.8	47.5
3	10.0	2.5	40.0
4	10.0	3.0	43.2
5	10.3	3.0	47.3

VARIETY (CUBANELLE) CONTROL R1			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	7.0	2.5	31.3
two	7.5	2.5	35.3
3	7.4	2.0	35.1
4	7.5	2.4	35.0
5	7.0	2.4	35.3

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
43.2	31.3	11.90	38.02
47.5	35.3	12.20	34.56
40.0	35.1	4.90	13.96
43.2	35.0	8.20	23.43
47.3	35.3	12.00	33.99
TOTAL	221.2	49.20	28.60

VARIETY (CUBANELLE) CROP BOOSTER R2			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	10.0	3.2	50.1
two	10.0	3.2	43.8
3	10.0	3.2	40.1
4	9.6	3.4	43.4
5	10.5	3.5	49.5

VARIETY (CUBANELLE) CONTROL R2			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	6.0	2.4	32.3
two	6.5	2.3	30.1
3	7.0	2.4	31.1
4	7.6	2.5	32.4
5	7.1	2.4	35.3

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
50.1	32.3	17.80	55.11
43.8	30.1	13.70	45.51
40.1	31.1	9.00	28.94
43.4	32.4	11.00	33.95
49.5	35.3	14.20	40.23
TOTAL	226.9	65.70	40.76

VARIETY (CUBANELLE) CROP BOOSTER R3			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	9.0	3.1	49.8
two	9.0	3.2	49.6
3	9.0	3.2	49.8
4	9.2	3.0	49.9
5	8.5	3.1	49.8

VARIETY (CUBANELLE) CONTROL R3			
FRUITS	Length (cm)	Width (cm)	Weight (grams)
one	8.0	3.0	30.1
two	8.5	2.6	30.5
3	8.0	2.5	32.4
4	7.5	2.5	31.1
5	7.0	2.4	29.9

Crop Booster Field	Witness Field	DIFFERENCE	
Weight (grams)	Weight (grams)	in grams	in %
49.8	30.1	19.70	65.45
49.6	30.5	19.10	62.62
49.8	32.4	17.40	53.70
49.9	31.1	18.80	60.45
49.8	29.9	19.90	66.56
TOTAL	248.9	154	61.62





