Greenhouse evaluation of EF polymer on soil moisture retention, soil chemistry, and plant growth

Trial ID: 26-US-POLYMER-CA

Protocol ID: 26-US-POLYMER-Pepper-CA
Location: California, USA

Sponsor: P&G, USA

The information and data collected in this report are truthful and accurate and have been generated according to acceptable procedures and standards.

Signature: **Date**: July-8-2026

Parsa Tehranchian

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Dr. Parsa Tehranchian
West Coast Bioefficacy Leader, USA
Global Lead – Early-Stage Screening and Resistance Testing

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

General Trial Information

Study Director: Parsa Tehranchian **Title:**West Coast Bioefficacy Leader

Discipline:SW soil and water
Status:R reviewed and reported
ARM Trial Created On: May-6-2026 **Reliability:**HIGH high quality
Initiation Date: May-4-2026
Completion Date: Jul-8-2026

Trial Location

City: Reedley **Country:**USA United States
State/Prov.: California **County:**Fresno
Postal Code:93654 **Climate Zone:**N/A Not Applicable

Latitude of LL Corner °:36.638723 N
Longitude of LL Corner °:-119.365635 W

Regulations

Conducted Under GLP: No
Conducted Under GEP: No

Objectives: To evaluate the effects of EF Polymer applied at four rates (0.2, 0.5, 0.75, and 1.0% w/w) on soil moisture retention, soil chemical properties, and plant growth compared with untreated control.

Materials and Methods: The experiment was conducted in a completely randomized design (CRD) with four treatments and six replications. Each replicate consisted of four sets of 6-cell transplanting inserts. A basic potting mix was purchased from ACE (ingredients: green waste compost, pumice, sphagnum peat moss, sand, and dolomite lime). EF Polymer was incorporated into the potting mix at the designated rates using a concrete mixer. Inserts were filled with 325 g of potting mix after incorporation of the EF Polymer treatments. Subsequently, EF Polymer-treated and untreated inserts were subirrigated with a 180 ppm Miracle-Gro Plant Food solution for 8 hours. Before recording weight and moisture content, all inserts were drained for 10 minutes on greenhouse tables. The greenhouse was maintained at 90/75°F (day/night) temperatures under a 12-hour photoperiod provided by LED hydroponic lights. Pepper (Capsicum annuum; variety: Banana pepper) seeds were planted the same day in each insert. To monitor moisture levels, the weight and moisture content (%) were recorded at 0, 7, 14, 30, and 45 days after seeding (DAS). All inserts were irrigated every 6 hours using automatic overhead misters and received an additional weekly irrigation of 60 mL per cell 4 hours before each evaluation. To measure N-P-K, pH, and EC levels, one 6-cell insert from each replicate was transferred from the greenhouse to refrigeration on 0, 14, 30, and 45 DAS and then submitted to the laboratory for analysis. Plant height, number of leaves, and fresh shoot biomass were recorded at 45 DAS. Data were subjected to ANOVA using ARM 2025, and treatment means were separated using Fisher's LSD at $\alpha = 0.05$. Means followed by the same letter or symbol were not significantly different.

Results:

Soil Water Retention: EF Polymer significantly improved soil water retention throughout the greenhouse study. At the initial evaluation (0 days after seeding; 0 DAS), both soil weight and soil moisture content increased with increasing polymer rate, and treatment effects were highly significant for all measurements. Similar responses were observed at 7 DAS, when soil weight remained significantly greater in polymer-treated treatments. At the 14 DAS evaluation, treatment differences for soil weight were not significant, indicating that soil mass was similar among treatments at that sampling date. However, soil moisture content remained significantly greater in polymer-treated soils compared with the untreated control, demonstrating continued water retention by the polymer. At 30 DAS, soil weight again did not differ significantly among treatments, whereas soil moisture remained significantly affected by polymer application. At the final evaluation on 45 DAS, treatment differences for both soil weight and soil moisture were significant, confirming that EF Polymer continued to improve water retention through the end of the study.

Overall, the highest polymer rates (0.75–1.0% w/w) produced the greatest improvements in soil water retention while maintaining acceptable soil chemical properties.

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Soil Chemical Properties: Soil nutrient concentration was significantly affected by treatment throughout most of the experiment. In general, nutrient concentration declined as polymer rate increased, most likely because increased soil water retention diluted soluble nutrient concentrations or nutrients were temporarily retained within the polymer matrix.

Soil pH: Polymer application significantly affected soil pH throughout the study. Soil pH generally increased with increasing polymer application rate, although differences among treatments became smaller later in the experiment.

Electrical Conductivity (EC): Electrical conductivity was not significantly affected by treatments. Overall, EC declined over time in all treatments as the experiment progressed.

Nitrate Concentration: Nitrate concentrations were not significantly affected by EF Polymer application at any sampling date. These results indicate that polymer incorporation at the evaluated rates had little influence on soil nitrate concentration.

Potassium Concentration: Treatment effects on potassium concentration were inconsistent during the study. Despite numerical variation among treatments, EF Polymer did not consistently influence soil potassium concentration over time.

Phosphorus Concentration: Soil phosphate phosphorus (PO_4-P) was significantly affected by EF Polymer during most of the study. Phosphorus concentrations generally declined as EF Polymer application rate increased. At the initial sampling, the untreated control had the highest phosphorus concentration (37.57 mg L^{-1}), whereas the 0.75% and 1.0% EF Polymer treatments had significantly lower concentrations (19.57 and 19.20 mg L^{-1}, respectively). Similar trends were observed at subsequent sampling dates, although treatment differences became smaller toward the end of the study. The reduced phosphorus concentrations in polymer treatments likely reflect dilution associated with increased soil water retention rather than a reduction in total phosphorus availability.

Plant Growth: Plant height was significantly affected by EF Polymer application. The untreated control produced the tallest plants (5.42 in), which was significantly greater than all EF Polymer treatments. Polymer-treated plants ranged from 3.92 to 4.58 in, with the 0.2% EF Polymer treatment producing the tallest plants among the polymer treatments (4.58 in). The 0.5, 0.75, and 1.0% EF Polymer treatments resulted in similar plant heights and were significantly shorter than the untreated control.

Leaf numbers were also significantly influenced by EF Polymer application. The untreated control produced the highest number of leaves, followed by 0.2% treatment and 0.75% treatment. The 0.5 and 1.0% polymer treatments produced the lowest leaf numbers, indicating a reduction in plant development at the higher application rates.

Fresh weight aboveground biomass differed significantly among treatments. The untreated control had the greatest plant fresh weight (1.198 g) at 45 DAS, while all EF Polymer treatments produced lower fresh weights, ranging from 0.810 to 0.893 g. Although EF Polymer improved soil moisture retention, the polymer treatments resulted in reduced plant height, leaf number, and fresh biomass compared with the untreated control under the conditions of this study.

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Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Contacts

Role:STYDIR study director
Study Director: Parsa Tehranchian **Title:**West Coast Bioefficacy Leader
Organization: SynTech Research Group
Address 1:23721 Clayton Ave **Phone No.:**559-637-7070
Country:USA United States **E-mail:**parsa.tehranchian@syntechresearch.com
City: Reedley **State/Prov:**CA **Postal Code:**93654

Role:SPONSR sponsor
Sponsor: Toby Adjuik **Title:**Research Agronomist
Organization:EF Polymer
Phone No.:740-249-7045
E-mail:toby.adjuik@efplomer.com

Crop Description

Crop 1:C CPSAN Capsicum annuum Bell Pepper **BBCH Scale:**BVSO
Entry Date: Jul-8-2026 **Stage Scale:**BBCH
Variety: Banana pepper
Planting Date: May-6-2026 **Planting Rate:**2 P/POT
Rows per Plot:1 **Planting Method:**SEEDHA seeded by hand
Row Spacing:2.25 IN **Planting Equipment:**HA by hand
Spacing within Row:2.25 IN

Site and Design

Treated Plot Width:3.3 IN **Site Type:**GREENH greenhouse
Treated Plot Length:5 IN **Experimental Unit:**1 POT pot/container
Treated Plot Area:16.5 IN2
Replications:6 **Treatments:**5 **Plots:**30 **Study Design:**RACOBL Randomized Complete Block (RCB)

Distance between Blocks:0 IN
Distance between 'Plot' Experimental Units:0 IN

Soil Description

Description Name:ACE potting soil

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Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Application Description

	A
Date	May-5-2026
Start Time	9:30 AM
Stop Time	1:10 PM
Method	INCORP
Placement	BROSOI
Mixed/Prepared By	PT
Applied By	PT
Air Temperature Start, Stop	85, 85 F
% Relative Humidity Start, Stop	40, -

Application Equipment

	A
Equipment Name	Concrete mix

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Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date				May-6-2026	May-6-2026	May-6-2026	May-6-2026
Part Rated				SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type				WEIGHT	MOICON	WEIGHT	MOICON
Rating Unit				g	%	g	%
Sample Size				1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis							
Number of Subsamples				1	1	1	1
Crop ID Code				1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale				BVSO	BVSO	BVSO	BVSO
Crop Scientific Name				Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name				Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety				Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.				1, 1	1, 1	1, 1	1, 1
Treatment Appl. Interval				1 DA-A	1 DA-A	1 DA-A	1 DA-A
Planting Interval				0 DP-1	0 DP-1	0 DP-1	0 DP-1
Description				1 hr. weight 6 >	1 hr. %Moisture>	3 hr. weight 6 >	3 hr. %Moisture>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4
1	UNTREATED CONTROL				646.5d	45.35d	619.3d	40.30d
2	EF Polymer	0.2%	w/w	A	681.8c	54.20c	647.7c	46.25c
3	EF Polymer	0.5%	w/w	A	686.3c	57.07c	655.8c	48.88c
4	EF Polymer	0.75%	w/w	A	708.0b	63.07b	679.3b	55.37b
5	EF Polymer	1%	w/w	A	727.2a	69.05a	702.5a	61.90a
LSD P=.05					10.93	4.346	11.56	3.097
Standard Deviation					9.08	3.609	9.60	2.571
CV					1.32	6.25	1.45	5.09
Grand Mean					689.97	57.747	660.93	50.540
Levene's F^					0.309	0.987	0.281	2.00
Levene's Prob(F)					0.869	0.433	0.888	0.125
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Shapiro-Wilk^					0.9353	0.9607	0.9789	0.9833
P(Shapiro-Wilk)^					0.0679	0.3221	0.7946	0.9043
Skewness^					0.535	-0.1879	-0.0852	0.1813
P(Skewness)^					0.2201	0.6631	0.8432	0.6741
Kurtosis^					-0.7125	-0.9301	0.1897	0.3067
P(Kurtosis)^					0.3992	0.2732	0.8214	0.7154
Replicate F					0.947	0.413	1.034	1.338
Replicate Prob(F)					0.4728	0.8343	0.4247	0.2889
Treatment F					66.936	37.183	65.070	63.147
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=9
^Calculated from residual.

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EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	5	6	7	8
	Rating Date				May-6-2026	May-6-2026	May-12-2026	May-19-2026
	Part Rated				SOIL, C	SOIL, C	SOIL, C	SOIL, C
	Rating Type				WEIGHT	MOICON	WEIGHT	WEIGHT
	Rating Unit				g	%	g	g
	Sample Size				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Collection Basis							
	Number of Subsamples				1	1	1	1
	Crop ID Code				1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
	BBCH Scale				BVSO	BVSO	BVSO	BVSO
	Crop Scientific Name				Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
	Crop Name				Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
	Crop Variety				Banana pepper	Banana pepper	Banana pepper	Banana pepper
	Days After First/Last Appl.				1, 1	1, 1	7, 7	14, 14
	Treatment Appl. Interval				1 DA-A	1 DA-A	7 DA-A	14 DA-A
	Planting Interval				0 DP-1	0 DP-1	6 DP-1	13 DP-1
	Description				6 hr. weight 6 >	6 hr. %Moisture>	6 DAT weight 6 >	13 DAT weight 6>
1	UNTREATED CONTROL				588.8d	33.90d	573.7c	630.3a
2	EF Polymer	0.2%	w/w	A	616.0c	41.98c	616.2b	638.5a
3	EF Polymer	0.5%	w/w	A	625.2c	46.78b	622.2ab	646.0a
4	EF Polymer	0.75%	w/w	A	645.0b	52.63a	639.0ab	639.8a
5	EF Polymer	1%	w/w	A	666.5a	56.25a	645.2a	647.3a
	LSD P=.05				13.47	3.946	23.10	16.54
	Standard Deviation				11.18	3.277	19.18	13.74
	CV				1.78	7.08	3.1	2.15
	Grand Mean				628.30	46.310	619.23	640.40
	Levene's F^				0.328	0.035	1.96	0.378
	Levene's Prob(F)				0.856	0.998	0.132	0.822
	Rank X2				.	.	.	.
	P(Rank X2)				.	.	.	.
	Shapiro-Wilk^				0.9679	0.9665	0.9817	0.9745
	P(Shapiro-Wilk)^				0.484	0.4492	0.8684	0.667
	Skewness^				-0.1371	-0.4728	-0.2193	0.0635
	P(Skewness)^				0.7504	0.2771	0.6113	0.8827
	Kurtosis^				-0.2319	-0.4439	-0.1839	-0.7878
	P(Kurtosis)^				0.7826	0.5981	0.8268	0.352
	Replicate F				0.316	1.323	2.581	0.821
	Replicate Prob(F)				0.8976	0.2945	0.0587	0.5491
	Treatment F				41.455	43.557	12.873	1.468
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.2491

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Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	9	10	11	12
Rating Date					May-19-2026	Jun-4-2026	Jun-4-2026	May-6-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					MOICON	WEIGHT	MOICON	CONNUT
Rating Unit					%	g	%	%
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					14, 14	30, 30	30, 30	1, 1
Treatment Appl. Interval					14 DA-A	30 DA-A	30 DA-A	1 DA-A
Planting Interval					13 DP-1	29 DP-1	29 DP-1	0 DP-1
Description					13 DAT %Moistur>	28 DAT weight 6>	28 DAT %Moistur>	%SP Sat. Paste
1	UNTREATED CONTROL				29.10c	598.7a	24.85d	230.0d
2	EF Polymer	0.2%	w/w	A	31.97bc	592.7a	26.97c	253.3bc
3	EF Polymer	0.5%	w/w	A	35.98b	607.5a	30.85b	243.3cd
4	EF Polymer	0.75%	w/w	A	34.02b	604.5a	31.88b	270.0ab
5	EF Polymer	1%	w/w	A	45.43a	615.0a	34.38a	286.7a
LSD P=.05					4.039	18.17	1.834	22.15
Standard Deviation					3.343	15.09	1.523	11.76
CV					9.47	2.5	5.11	4.58
Grand Mean					35.301	603.67	29.787	256.67
Levene's F^					1.562	1.299	0.04	0.922
Levene's Prob(F)					0.216	0.297	0.997	0.488
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Shapiro-Wilk^					0.9436	0.9409	0.9767	0.9858
P(Shapiro-Wilk)^					0.1243	0.096	0.733	0.9947
Skewness^					-0.2218	-1.0218*	0.0074	-0.1407
P(Skewness)^					0.6129	0.0234*	0.9863	0.8119
Kurtosis^					-1.0514	2.3183*	0.0645	0.1774
P(Kurtosis)^					0.2238	0.0094*	0.9388	0.8765
Replicate F					0.231	1.060	2.046	0.337
Replicate Prob(F)					0.9444	0.4113	0.1155	0.7233
Treatment F					20.715	1.909	38.152	10.723
Treatment Prob(F)					0.0001	0.1483	0.0001	0.0027

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Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	13	14	15	16
Rating Date					May-6-2026	May-6-2026	May-6-2026	May-6-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					PH	ELCOND	CONNO3	CONNUT
Rating Unit					PH	DS/M	mg/L	mg/L
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					1, 1	1, 1	1, 1	1, 1
Treatment Appl. Interval					1 DA-A	1 DA-A	1 DA-A	1 DA-A
Planting Interval					0 DP-1	0 DP-1	0 DP-1	0 DP-1
Description					pH Sat. Paste	EC dS/m Sat. Pa>	NO-3-N mg/l Sat>	PO4-P mg/l Sat.>
1	UNTREATED CONTROL				6.83c	2.257a	0.30a	37.57a
2	EF Polymer	0.2%	w/w	A	7.07b	2.490a	0.30a	29.47b
3	EF Polymer	0.5%	w/w	A	7.17b	2.203a	0.30a	31.80b
4	EF Polymer	0.75%	w/w	A	7.63a	2.520a	0.37a	19.57c
5	EF Polymer	1%	w/w	A	7.60a	2.430a	0.37a	19.20c
LSD P=.05					0.100	0.3405	0.073	2.934
Standard Deviation					0.053	0.1808	0.039	1.558
CV					0.73	7.6	11.86	5.66
Grand Mean					7.260	2.3800	0.327	27.520
Levene's F^					0.302	0.28	0.828	0.102
Levene's Prob(F)					0.87	0.884	0.537	0.979
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Shapiro-Wilk^					0.9501	0.9588	0.8646*	0.9321
P(Shapiro-Wilk)^					0.5256	0.6713	0.0282*	0.2932
Skewness^					0.506	-0.0701	-0.9634	-0.2371
P(Skewness)^					0.3978	0.9055	0.119	0.6889
Kurtosis^					-0.2441	-1.0123	0.9373	-1.3444
P(Kurtosis)^					0.8308	0.3817	0.4171	0.2503
Replicate F					0.706	0.470	0.444	0.337
Replicate Prob(F)					0.5220	0.6414	0.6561	0.7236
Treatment F					127.882	1.849	2.667	78.930
Treatment Prob(F)					0.0001	0.2130	0.1108	0.0001

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Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date				May-6-2026	May-19-2026	May-19-2026	May-19-2026
Part Rated				SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type				CONK	CONNUT	PH	ELCOND
Rating Unit				mg/L	%	PH	DS/M
Sample Size				1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis							
Number of Subsamples				1	1	1	1
Crop ID Code				1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale				BVSO	BVSO	BVSO	BVSO
Crop Scientific Name				Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name				Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety				Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.				1, 1	14, 14	14, 14	14, 14
Treatment Appl. Interval				1 DA-A	14 DA-A	14 DA-A	14 DA-A
Planting Interval				0 DP-1	13 DP-1	13 DP-1	13 DP-1
Description				K mg/l Sat. Pas>	%SP Sat. Paste	pH Sat. Paste	EC dS/m Sat. Pa>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	17	18	19	20
1	UNTREATED CONTROL				485.0a	226.7b	7.10c	1.427c
2	EF Polymer	0.2%	w/w	A	576.7a	233.3b	7.23bc	2.550a
3	EF Polymer	0.5%	w/w	A	489.7a	233.3b	7.40b	1.250c
4	EF Polymer	0.75%	w/w	A	560.7a	286.7a	7.73a	1.877b
5	EF Polymer	1%	w/w	A	550.7a	286.7a	7.70a	1.297c
LSD P=.05					72.47	17.86	0.223	0.3401
Standard Deviation					38.49	9.49	0.118	0.1806
CV					7.23	3.74	1.59	10.75
Grand Mean					532.53	253.33	7.433	1.6800
Levene's F^					0.256	0.222	0.417	0.30
Levene's Prob(F)					0.899	0.92	0.793	0.871
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Shapiro-Wilk^					0.9357	0.8789*	0.9337	0.9531
P(Shapiro-Wilk)^					0.3312	0.0456*	0.3096	0.5749
Skewness^					-0.2748	0.8998	0.7249	-0.3853
P(Skewness)^					0.643	0.1432	0.232	0.5173
Kurtosis^					-1.0785	-0.2149	0.8864	-0.7483
P(Kurtosis)^					0.3523	0.8507	0.4422	0.5152
Replicate F					0.493	4.519	0.048	0.355
Replicate Prob(F)					0.6282	0.0486	0.9538	0.7118
Treatment F					3.627	31.111	16.786	27.389
Treatment Prob(F)					0.0571	0.0001	0.0006	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=9
^Calculated from residual.

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date				May-19-2026	May-19-2026	May-19-2026	Jun-19-2026
Part Rated				SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type				CONNO3	CONNUT	CONK	WEIGHT
Rating Unit				mg/L	mg/L	mg/L	g
Sample Size				1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis							
Number of Subsamples				1	1	1	1
Crop ID Code				1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale				BVSO	BVSO	BVSO	BVSO
Crop Scientific Name				Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name				Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety				Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.				14, 14	14, 14	14, 14	45, 45
Treatment Appl. Interval				14 DA-A	14 DA-A	14 DA-A	45 DA-A
Planting Interval				13 DP-1	13 DP-1	13 DP-1	44 DP-1
Description				NO-3-N mg/l Sat>	PO4-P mg/l Sat.>	K mg/l Sat. Pas>	28 DAT weight 6>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	21	22	23	24
1	UNTREATED CONTROL				0.43a	27.40a	252.7c	594.0bc
2	EF Polymer	0.2%	w/w	A	0.27a	24.47ab	524.7a	577.3c
3	EF Polymer	0.5%	w/w	A	0.33a	22.47b	198.7c	614.8ab
4	EF Polymer	0.75%	w/w	A	0.27a	16.30c	358.0b	612.7ab
5	EF Polymer	1%	w/w	A	0.27a	16.03c	227.7c	620.8a
LSD P=.05					0.168	3.000	96.68	24.06
Standard Deviation					0.089	1.593	51.35	19.98
CV					28.55	7.47	16.44	3.31
Grand Mean					0.313	21.333	312.33	603.93
Levene's F^					0.525	0.314	0.431	1.379
Levene's Prob(F)					0.72	0.862	0.783	0.27
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Shapiro-Wilk^					0.9586	0.926	0.9344	0.9145*
P(Shapiro-Wilk)^					0.6683	0.2377	0.3172	0.0194*
Skewness^					0.4977	-1.0232	-0.712	-1.1718*
P(Skewness)^					0.4053	0.0996	0.2399	0.0103*
Kurtosis^					-0.0785	1.2115	-0.0713	3.6291*
P(Kurtosis)^					0.9451	0.298	0.9501	0.0002*
Replicate F					0.583	1.207	0.304	2.423
Replicate Prob(F)					0.5801	0.3482	0.7460	0.0715
Treatment F					2.000	29.934	20.145	4.835
Treatment Prob(F)					0.1875	0.0001	0.0003	0.0068

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Missing data estimates are included in columns:Yates=9
^Calculated from residual.

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	25	26	27	28
Rating Date					Jun-19-2026	Jun-19-2026	Jun-19-2026	Jun-19-2026
Part Rated					SOIL, C	PLANT, C	LEAF, C	PLANT, C
Rating Type					MOICON	HEIGHT	COPLPA	WEIGHT
Rating Unit					%	IN	NUMBER	g
Sample Size					1 PLOT	1 PLANT	1 PLANT	1 PLANT
Collection Basis						1 PLANT	1 PLANT	1 PLANT
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					45, 45	45, 45	45, 45	45, 45
Treatment Appl. Interval					45 DA-A	45 DA-A	45 DA-A	45 DA-A
Planting Interval					44 DP-1	44 DP-1	44 DP-1	44 DP-1
Description					28 DAT %Moistur>	Plant Height	# of leaves	Weight of plant
1	UNTREATED CONTROL				25.60c	5.42a	6.2a	1.198a
2	EF Polymer	0.2%	w/w	A	30.97b	4.58b	5.5b	0.893b
3	EF Polymer	0.5%	w/w	A	31.23b	4.00c	4.8c	0.823b
4	EF Polymer	0.75%	w/w	A	31.47b	4.08c	5.2bc	0.875b
5	EF Polymer	1%	w/w	A	33.47a	3.92c	4.8c	0.810b
LSD P=.05					1.612	0.469	0.64	0.1881
Standard Deviation					1.338	0.389	0.54	0.1562
CV					4.38	8.85	10.1	16.98
Grand Mean					30.547	4.400	5.30	0.9200
Levene's F^					1.668	0.328	1.78	0.312
Levene's Prob(F)					0.189	0.856	0.164	0.867
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Shapiro-Wilk^					0.9527	0.9653	0.9842	0.9425
P(Shapiro-Wilk)^					0.1996	0.4205	0.9237	0.1061
Skewness^					0.8152	-0.5242	0.0	0.8077
P(Skewness)^					0.0661	0.2293	1.0	0.0685
Kurtosis^					2.1527*	-0.1133	-0.2329	0.4348
P(Kurtosis)^					0.015*	0.8927	0.7817	0.6056
Replicate F					0.934	1.055	0.767	1.927
Replicate Prob(F)					0.4801	0.4139	0.5841	0.1346
Treatment F					28.894	15.440	6.512	6.251
Treatment Prob(F)					0.0001	0.0001	0.0016	0.0020

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
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Missing data estimates are included in columns:Yates=9
^Calculated from residual.

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date				Jun-4-2026	Jun-4-2026	Jun-4-2026	Jun-4-2026
Part Rated				SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type				CONNUT	PH	ELCOND	CONNO3
Rating Unit				%	PH	DS/M	mg/L
Sample Size				1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis							
Number of Subsamples				1	1	1	1
Crop ID Code				1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale				BVSO	BVSO	BVSO	BVSO
Crop Scientific Name				Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name				Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety				Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.				30, 30	30, 30	30, 30	30, 30
Treatment Appl. Interval				30 DA-A	30 DA-A	30 DA-A	30 DA-A
Planting Interval				29 DP-1	29 DP-1	29 DP-1	29 DP-1
Description				%SP Sat. Paste	pH Sat. Paste	EC dS/m Sat. Pa>	NO-3-N mg/l Sat>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	29	30	31	32
1	UNTREATED CONTROL				203.3d	7.40b	1.063a	0.20a
2	EF Polymer	0.2%	w/w	A	230.0c	7.60b	1.213a	0.17a
3	EF Polymer	0.5%	w/w	A	203.3d	7.50b	0.877a	0.17a
4	EF Polymer	0.75%	w/w	A	260.0b	7.90a	0.843a	0.13a
5	EF Polymer	1%	w/w	A	280.0a	8.00a	0.790a	0.13a
LSD P=.05					8.42	0.202	0.4526	0.100
Standard Deviation					4.47	0.107	0.2404	0.053
CV					1.9	1.4	25.11	33.27
Grand Mean					235.33	7.680	0.9573	0.160
Levene's F^					0.50	0.159	0.932	0.302
Levene's Prob(F)					0.737	0.954	0.484	0.87
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Shapiro-Wilk^					0.9437	0.8147*	0.9376	0.9501
P(Shapiro-Wilk)^					0.4308	0.0057*	0.3534	0.5256
Skewness^					-0.5689	-0.7798	0.756	0.506
P(Skewness)^					0.3434	0.2003	0.2135	0.3978
Kurtosis^					-0.359	-0.8662	1.9119	-0.2441
P(Kurtosis)^					0.7535	0.4525	0.1101	0.8308
Replicate F					4.333	1.217	0.920	0.706
Replicate Prob(F)					0.0531	0.3455	0.4371	0.5220
Treatment F					175.500	17.478	1.613	0.824
Treatment Prob(F)					0.0001	0.0005	0.2615	0.5454

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=9
^Calculated from residual.

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	33	34	35	36
	Rating Date				Jun-4-2026	Jun-4-2026	Jun-19-2026	Jun-19-2026
	Part Rated				SOIL, C	SOIL, C	SOIL, C	SOIL, C
	Rating Type				CONNUT	CONK	CONNUT	PH
	Rating Unit				mg/L	mg/L	%	PH
	Sample Size				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Collection Basis							
	Number of Subsamples				1	1	1	1
	Crop ID Code				1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
	BBCH Scale				BVSO	BVSO	BVSO	BVSO
	Crop Scientific Name				Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
	Crop Name				Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
	Crop Variety				Banana pepper	Banana pepper	Banana pepper	Banana pepper
	Days After First/Last Appl.				30, 30	30, 30	45, 45	45, 45
	Treatment Appl. Interval				30 DA-A	30 DA-A	45 DA-A	45 DA-A
	Planting Interval				29 DP-1	29 DP-1	44 DP-1	44 DP-1
	Description				PO4-P mg/l Sat.>	K mg/l Sat. Pas>	%SP Sat. Paste	pH Sat. Paste
1	UNTREATED CONTROL				22.83a	142.00a	260.0a	7.60c
2	EF Polymer	0.2%	w/w	A	18.80b	183.67a	276.7a	7.77ab
3	EF Polymer	0.5%	w/w	A	18.10b	69.13a	270.0a	7.73bc
4	EF Polymer	0.75%	w/w	A	13.30c	106.67a	320.0a	7.90a
5	EF Polymer	1%	w/w	A	13.17c	100.60a	280.0a	7.83ab
	LSD P=.05				2.221	92.265	40.46	0.150
	Standard Deviation				1.180	49.003	21.49	0.080
	CV				6.84	40.7	7.64	1.02
	Grand Mean				17.240	120.413	281.33	7.767
	Levene's F^				0.268	1.12	0.901	1.364
	Levene's Prob(F)				0.892	0.40	0.499	0.314
	Rank X2				.	.	.	.
	P(Rank X2)				.	.	.	.
	Shapiro-Wilk^				0.9663	0.9347	0.9613	0.9666
	P(Shapiro-Wilk)^				0.7994	0.3205	0.7148	0.8041
	Skewness^				0.4079	0.7301	0.3334	0.1514
	P(Skewness)^				0.4935	0.2288	0.5746	0.7979
	Kurtosis^				-0.1821	0.7894	-0.0273	1.5229
	P(Kurtosis)^				0.8733	0.4928	0.9809	0.1957
	Replicate F				1.006	0.455	0.188	0.737
	Replicate Prob(F)				0.4076	0.6498	0.8324	0.5085
	Treatment F				35.878	2.398	3.415	6.053
	Treatment Prob(F)				0.0001	0.1360	0.0655	0.0152

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=9
^Calculated from residual.

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	37	38	39	40
Rating Date					Jun-19-2026	Jun-19-2026	Jun-19-2026	Jun-19-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					ELCOND	CONNO3	CONNUT	CONK
Rating Unit					DS/M	mg/L	mg/L	mg/L
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					45, 45	45, 45	45, 45	45, 45
Treatment Appl. Interval					45 DA-A	45 DA-A	45 DA-A	45 DA-A
Planting Interval					44 DP-1	44 DP-1	44 DP-1	44 DP-1
Description					EC dS/m Sat. Pa>	NO-3-N mg/l Sat>	PO4-P mg/l Sat.>	K mg/l Sat. Pas>
1	UNTREATED CONTROL				1.090a	0.20a	16.87a	99.93a
2	EF Polymer	0.2%	w/w	A	0.967a	0.23a	15.37a	94.00a
3	EF Polymer	0.5%	w/w	A	1.030a	0.20a	15.57a	97.20a
4	EF Polymer	0.75%	w/w	A	0.997a	0.23a	11.60b	62.60a
5	EF Polymer	1%	w/w	A	0.997a	0.23a	12.60b	57.20a
LSD P=.05					0.1676	0.126	2.081	40.268
Standard Deviation					0.0890	0.067	1.105	21.387
CV					8.76	30.49	7.67	26.02
Grand Mean					1.0160	0.220	14.400	82.187
Levene's F^					0.105	0.433	0.206	0.187
Levene's Prob(F)					0.978	0.782	0.929	0.94
Rank X2					.	.	.	.
P(Rank X2)					.	.	.	.
Shapiro-Wilk^					0.8961	0.9448	0.9483	0.9409
P(Shapiro-Wilk)^					0.0831	0.4465	0.4976	0.394
Skewness^					-0.4921	0.4214	-0.1061	-0.0066
P(Skewness)^					0.4106	0.4796	0.8574	0.9911
Kurtosis^					-1.0784	-0.7468	-1.2245	-1.2273
P(Kurtosis)^					0.3523	0.5161	0.2931	0.292
Replicate F					0.798	0.444	1.053	0.306
Replicate Prob(F)					0.4831	0.6561	0.3926	0.7445
Treatment F					0.838	0.222	11.953	2.768
Treatment Prob(F)					0.5378	0.9185	0.0019	0.1029

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=9
^Calculated from residual.

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					May-6-2026	May-6-2026	May-6-2026	May-6-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					WEIGHT	MOICON	WEIGHT	MOICON
Rating Unit					g	%	g	%
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					1, 1	1, 1	1, 1	1, 1
Treatment Appl. Interval					1 DA-A	1 DA-A	1 DA-A	1 DA-A
Planting Interval					0 DP-1	0 DP-1	0 DP-1	0 DP-1
Description					1 hr. weight 6 >	1 hr. %Moisture>	3 hr. weight 6 >	3 hr. %Moisture>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	1	2	3	4
1	UNTREATED CONTROL				102	631.0	43.40	595.0	42.70
					204	648.0	49.90	622.0	39.60
					303	650.0	40.80	621.0	38.80
					401	644.0	45.20	619.0	42.20
					505	659.0	44.00	632.0	38.20
					602	647.0	48.80	627.0	40.30
					Mean =	646.5	45.35	619.3	40.30
2	EF Polymer	0.2%	w/w	A	103	679.0	51.70	649.0	41.10
					202	694.0	55.90	652.0	42.20
					301	684.0	54.20	649.0	52.20
					403	670.0	50.50	647.0	46.20
					504	675.0	57.80	639.0	44.00
					603	689.0	55.10	650.0	51.80
					Mean =	681.8	54.20	647.7	46.25
3	EF Polymer	0.5%	w/w	A	104	696.0	58.70	667.0	51.60
					201	678.0	58.40	638.0	46.90
					305	704.0	61.10	667.0	49.60
					402	681.0	54.30	652.0	48.60
					503	679.0	56.20	653.0	49.60
					601	680.0	53.70	658.0	47.00
					Mean =	686.3	57.07	655.8	48.88
4	EF Polymer	0.75%	w/w	A	101	703.0	60.60	664.0	54.50
					205	723.0	66.00	680.0	55.40
					304	707.0	64.30	685.0	58.80
					405	703.0	67.30	677.0	55.00
					502	710.0	58.20	689.0	55.10
					604	702.0	62.00	681.0	53.40
					Mean =	708.0	63.07	679.3	55.37
5	EF Polymer	1%	w/w	A	105	719.0	65.50	698.0	60.10
					203	724.0	64.30	696.0	61.20
					302	734.0	65.90	706.0	64.10
					404	736.0	74.40	713.0	62.50
					501	718.0	72.20	690.0	60.30
					605	732.0	72.00	712.0	63.20
					Mean =	727.2	69.05	702.5	61.90

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date						May-6-2026	May-6-2026	May-12-2026	May-19-2026
Part Rated						SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type						WEIGHT	MOICON	WEIGHT	WEIGHT
Rating Unit						g	%	g	g
Sample Size						1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis									
Number of Subsamples						1	1	1	1
Crop ID Code						1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale						BVSO	BVSO	BVSO	BVSO
Crop Scientific Name						Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name						Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety						Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.						1, 1	1, 1	7, 7	14, 14
Treatment Appl. Interval						1 DA-A	1 DA-A	7 DA-A	14 DA-A
Planting Interval						0 DP-1	0 DP-1	6 DP-1	13 DP-1
Description						6 hr. weight 6 >	6 hr. %Moisture>	6 DAT weight 6 >	13 DAT weight 6>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	5	6	7	8
1	UNTREATED CONTROL				102	570.0	32.30	517.0	613.0
					204	593.0	28.70	552.0	638.0
					303	587.0	36.30	560.0	634.0
					401	590.0	36.10	586.0	635.0
					505	597.0	30.40	609.0	633.0
					602	596.0	39.60	618.0	629.0
					Mean =	588.8	33.90	573.7	630.3
2	EF Polymer	0.2%	w/w	A	103	621.0	39.20	609.0	630.0
					202	626.0	41.40	632.0	639.0
					301	601.0	38.40	623.0	625.0
					403	620.0	44.50	625.0	642.0
					504	619.0	39.30	604.0	648.0
					603	609.0	49.10	604.0	647.0
					Mean =	616.0	41.98	616.2	638.5
3	EF Polymer	0.5%	w/w	A	104	642.0	49.00	616.0	668.0
					201	607.0	46.60	621.0	635.0
					305	636.0	49.30	625.0	624.0
					402	622.0	47.00	624.0	642.0
					503	619.0	46.00	628.0	653.0
					601	625.0	42.80	619.0	654.0
					Mean =	625.2	46.78	622.2	646.0
4	EF Polymer	0.75%	w/w	A	101	624.0	52.70	626.0	640.0
					205	645.0	54.60	609.0	619.0
					304	654.0	53.60	655.0	657.0
					405	643.0	51.30	628.0	643.0
					502	655.0	53.10	659.0	656.0
					604	649.0	50.50	657.0	624.0
					Mean =	645.0	52.63	639.0	639.8
5	EF Polymer	1%	w/w	A	105	662.0	55.00	625.0	651.0
					203	658.0	56.90	620.0	626.0
					302	672.0	53.90	642.0	664.0
					404	676.0	60.30	660.0	665.0
					501	657.0	50.60	657.0	644.0
					605	674.0	60.80	667.0	634.0
					Mean =	666.5	56.25	645.2	647.3

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					May-19-2026	Jun-4-2026	Jun-4-2026	May-6-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					MOICON	WEIGHT	MOICON	CONNUT
Rating Unit					%	g	%	%
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					14, 14	30, 30	30, 30	1, 1
Treatment Appl. Interval					14 DA-A	30 DA-A	30 DA-A	1 DA-A
Planting Interval					13 DP-1	29 DP-1	29 DP-1	0 DP-1
Description					13 DAT %Moistur>	28 DAT weight 6>	28 DAT %Moistur>	%SP Sat. Paste
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	9	10	11	12
1	UNTREATED CONTROL				102	24.90	587.0	24.50	230.0
					204	29.90	598.0	26.60	220.0
					303	25.10	600.0	24.90	240.0
					401	30.60	604.0	22.30	
					505	31.10	595.0	25.70	
					602	33.00	608.0	25.10	
					Mean =	29.10	598.7	24.85	230.0
2	EF Polymer	0.2%	w/w	A	103	30.50	571.0	26.70	260.0
					202	32.30	609.0	26.10	250.0
					301	30.60	546.0	25.50	250.0
					403	31.50	605.0	28.40	
					504	31.94*	610.0	29.40	
					603	35.00	615.0	25.70	
					Mean =	31.97	592.7	26.97	253.3
3	EF Polymer	0.5%	w/w	A	104	36.00	600.0	31.40	240.0
					201	33.00	612.0	32.10	250.0
					305	39.60	599.0	30.90	240.0
					402	31.10	617.0	31.30	
					503	39.10	600.0	31.40	
					601	37.10	617.0	28.00	
					Mean =	35.98	607.5	30.85	243.3
4	EF Polymer	0.75%	w/w	A	101	36.20	606.0	30.90	250.0
					205	33.30	589.0	32.10	290.0
					304	36.80	612.0	29.40	270.0
					405	32.50	590.0	34.90	
					502	33.60	609.0	33.20	
					604	31.70	621.0	30.80	
					Mean =	34.02	604.5	31.88	270.0
5	EF Polymer	1%	w/w	A	105	47.50	618.0	33.40	290.0
					203	49.50	609.0	37.60	290.0
					302	40.50	629.0	33.00	280.0
					404	48.50	617.0	32.50	
					501	40.60	601.0	35.10	
					605	46.00	616.0	34.70	
					Mean =	45.43	615.0	34.38	286.7

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					May-6-2026	May-6-2026	May-6-2026	May-6-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					PH	ELCOND	CONNO3	CONNUT
Rating Unit					PH	DS/M	mg/L	mg/L
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					1, 1	1, 1	1, 1	1, 1
Treatment Appl. Interval					1 DA-A	1 DA-A	1 DA-A	1 DA-A
Planting Interval					0 DP-1	0 DP-1	0 DP-1	0 DP-1
Description					pH Sat. Paste	EC dS/m Sat. Pa>	NO-3-N mg/l Sat>	PO4-P mg/l Sat.>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	13	14	15	16
1	UNTREATED CONTROL				102	6.80	2.150	0.30	37.80
					204	6.80	2.510	0.30	38.60
					303	6.90	2.110	0.30	36.30
					401				
					505				
					602				
					Mean =	6.83	2.257	0.30	37.57
2	EF Polymer	0.2%	w/w	A	103	7.10	2.240	0.30	27.70
					202	7.10	2.620	0.30	29.60
					301	7.00	2.610	0.30	31.10
					403				
					504				
					603				
					Mean =	7.07	2.490	0.30	29.47
3	EF Polymer	0.5%	w/w	A	104	7.20	2.050	0.30	29.40
					201	7.20	2.250	0.30	32.40
					305	7.10	2.310	0.30	33.60
					402				
					503				
					601				
					Mean =	7.17	2.203	0.30	31.80
4	EF Polymer	0.75%	w/w	A	101	7.60	2.580	0.30	20.10
					205	7.70	2.430	0.40	19.70
					304	7.60	2.550	0.40	18.90
					405				
					502				
					604				
					Mean =	7.63	2.520	0.37	19.57
5	EF Polymer	1%	w/w	A	105	7.60	2.560	0.40	20.30
					203	7.60	2.250	0.30	18.10
					302	7.60	2.480	0.40	19.20
					404				
					501				
					605				
					Mean =	7.60	2.430	0.37	19.20

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					May-6-2026	May-19-2026	May-19-2026	May-19-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					CONK	CONNUT	PH	ELCOND
Rating Unit					mg/L	%	PH	DS/M
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					1, 1	14, 14	14, 14	14, 14
Treatment Appl. Interval					1 DA-A	14 DA-A	14 DA-A	14 DA-A
Planting Interval					0 DP-1	13 DP-1	13 DP-1	13 DP-1
Description					K mg/l Sat. Pas>	%SP Sat. Paste	pH Sat. Paste	EC dS/m Sat. Pa>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	17	18	19	20
1	UNTREATED CONTROL				102	478.0	230.0	7.10	1.210
					204	529.0	220.0	7.10	1.510
					303	448.0	230.0	7.10	1.560
					401				
					505				
					602				
					Mean =	485.0	226.7	7.10	1.427
2	EF Polymer	0.2%	w/w	A	103	521.0	240.0	7.30	2.520
					202	602.0	220.0	7.20	2.540
					301	607.0	240.0	7.20	2.590
					403				
					504				
					603				
					Mean =	576.7	233.3	7.23	2.550
3	EF Polymer	0.5%	w/w	A	104	448.0	240.0	7.30	1.340
					201	499.0	220.0	7.30	1.410
					305	522.0	240.0	7.60	1.000
					402				
					503				
					601				
					Mean =	489.7	233.3	7.40	1.250
4	EF Polymer	0.75%	w/w	A	101	565.0	280.0	7.80	2.080
					205	549.0	290.0	7.80	1.750
					304	568.0	290.0	7.60	1.800
					405				
					502				
					604				
					Mean =	560.7	286.7	7.73	1.877
5	EF Polymer	1%	w/w	A	105	581.0	280.0	7.70	1.480
					203	515.0	270.0	7.80	1.210
					302	556.0	310.0	7.60	1.200
					404				
					501				
					605				
					Mean =	550.7	286.7	7.70	1.297

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					May-19-2026	May-19-2026	May-19-2026	Jun-19-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					CONNO3	CONNUT	CONK	WEIGHT
Rating Unit					mg/L	mg/L	mg/L	g
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					14, 14	14, 14	14, 14	45, 45
Treatment Appl. Interval					14 DA-A	14 DA-A	14 DA-A	45 DA-A
Planting Interval					13 DP-1	13 DP-1	13 DP-1	44 DP-1
Description					NO-3-N mg/l Sat>	PO4-P mg/l Sat.>	K mg/l Sat. Pas>	28 DAT weight 6>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	21	22	23	24
1	UNTREATED CONTROL				102	0.60	26.60	197.0	579.0
					204	0.40	28.50	273.0	568.0
					303	0.30	27.10	288.0	613.0
					401				600.0
					505				604.0
					602				600.0
					Mean =	0.43	27.40	252.7	594.0
2	EF Polymer	0.2%	w/w	A	103	0.30	24.60	519.0	507.0
					202	0.30	24.20	516.0	545.0
					301	0.20	24.60	539.0	606.0
					403				589.0
					504				602.0
					603				615.0
					Mean =	0.27	24.47	524.7	577.3
3	EF Polymer	0.5%	w/w	A	104	0.30	24.50	238.0	626.0
					201	0.30	24.30	254.0	601.0
					305	0.40	18.60	104.0	630.0
					402				601.0
					503				614.0
					601				617.0
					Mean =	0.33	22.47	198.7	614.8
4	EF Polymer	0.75%	w/w	A	101	0.20	17.20	390.0	607.0
					205	0.30	15.50	330.0	599.0
					304	0.30	16.20	354.0	623.0
					405				603.0
					502				626.0
					604				618.0
					Mean =	0.27	16.30	358.0	612.7
5	EF Polymer	1%	w/w	A	105	0.30	16.60	266.0	631.0
					203	0.30	15.80	212.0	613.0
					302	0.20	15.70	205.0	636.0
					404				631.0
					501				598.0
					605				616.0
					Mean =	0.27	16.03	227.7	620.8

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					Jun-19-2026	Jun-19-2026	Jun-19-2026	Jun-19-2026
Part Rated					SOIL, C	PLANT, C	LEAF, C	PLANT, C
Rating Type					MOICON	HEIGHT	COPLPA	WEIGHT
Rating Unit					%	IN	NUMBER	g
Sample Size					1 PLOT	1 PLANT	1 PLANT	1 PLANT
Collection Basis						1 PLANT	1 PLANT	1 PLANT
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					45, 45	45, 45	45, 45	45, 45
Treatment Appl. Interval					45 DA-A	45 DA-A	45 DA-A	45 DA-A
Planting Interval					44 DP-1	44 DP-1	44 DP-1	44 DP-1
Description					28 DAT %Moistur>	Plant Height	# of leaves	Weight of plant
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	25	26	27	28
1	UNTREATED CONTROL				102	26.00	6.00	6.0	0.920
					204	29.50	6.00	6.0	1.160
					303	22.40	5.00	7.0	1.320
					401	26.40	5.50	6.0	1.610
					505	24.00	5.00	6.0	1.140
					602	25.30	5.00	6.0	1.040
					Mean =	25.60	5.42	6.2	1.198
2	EF Polymer	0.2%	w/w	A	103	31.70	5.00	6.0	0.790
					202	30.40	4.50	6.0	0.880
					301	30.20	4.50	5.0	1.140
					403	31.40	4.50	5.0	0.840
					504	29.40	4.50	5.0	0.860
					603	32.70	4.50	6.0	0.850
					Mean =	30.97	4.58	5.5	0.893
3	EF Polymer	0.5%	w/w	A	104	30.80	3.50	5.0	0.860
					201	30.40	4.00	5.0	0.910
					305	30.20	4.00	5.0	0.850
					402	31.20	4.00	4.0	0.660
					503	32.90	4.50	5.0	0.820
					601	31.90	4.00	5.0	0.840
					Mean =	31.23	4.00	4.8	0.823
4	EF Polymer	0.75%	w/w	A	101	31.20	4.50	5.0	0.620
					205	31.50	4.50	5.0	1.170
					304	31.30	4.00	6.0	0.780
					405	30.90	4.50	6.0	0.980
					502	31.90	4.00	5.0	1.030
					604	32.00	3.00	4.0	0.670
					Mean =	31.47	4.08	5.2	0.875
5	EF Polymer	1%	w/w	A	105	34.20	3.50	5.0	0.610
					203	33.00	4.00	5.0	0.880
					302	33.20	4.00	5.0	0.770
					404	32.70	4.00	5.0	0.810
					501	34.30	4.00	5.0	0.990
					605	33.40	4.00	4.0	0.800
					Mean =	33.47	3.92	4.8	0.810

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					Jun-4-2026	Jun-4-2026	Jun-4-2026	Jun-4-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					CONNUT	PH	ELCOND	CONNO3
Rating Unit					%	PH	DS/M	mg/L
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					30, 30	30, 30	30, 30	30, 30
Treatment Appl. Interval					30 DA-A	30 DA-A	30 DA-A	30 DA-A
Planting Interval					29 DP-1	29 DP-1	29 DP-1	29 DP-1
Description					%SP Sat. Paste	pH Sat. Paste	EC dS/m Sat. Pa>	NO-3-N mg/l Sat>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	29	30	31	32
1	UNTREATED CONTROL				102	200.0	7.30	1.150	0.20
					204	200.0	7.40	1.050	0.20
					303	210.0	7.50	0.990	0.20
					401				
					505				
					602				
					Mean =	203.3	7.40	1.063	0.20
2	EF Polymer	0.2%	w/w	A	103	220.0	7.40	1.770	0.20
					202	230.0	7.70	1.060	0.10
					301	240.0	7.70	0.810	0.20
					403				
					504				
					603				
					Mean =	230.0	7.60	1.213	0.17
3	EF Polymer	0.5%	w/w	A	104	200.0	7.50	0.800	0.20
					201	200.0	7.40	0.920	0.10
					305	210.0	7.60	0.910	0.20
					402				
					503				
					601				
					Mean =	203.3	7.50	0.877	0.17
4	EF Polymer	0.75%	w/w	A	101	260.0	7.90	0.720	0.20
					205	260.0	8.00	1.010	0.10
					304	260.0	7.80	0.800	0.10
					405				
					502				
					604				
					Mean =	260.0	7.90	0.843	0.13
5	EF Polymer	1%	w/w	A	105	280.0	8.00	0.850	0.10
					203	280.0	8.00	0.770	0.20
					302	280.0	8.00	0.750	0.10
					404				
					501				
					605				
					Mean =	280.0	8.00	0.790	0.13

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					Jun-4-2026	Jun-4-2026	Jun-19-2026	Jun-19-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					CONNUT	CONK	CONNUT	PH
Rating Unit					mg/L	mg/L	%	PH
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					30, 30	30, 30	45, 45	45, 45
Treatment Appl. Interval					30 DA-A	30 DA-A	45 DA-A	45 DA-A
Planting Interval					29 DP-1	29 DP-1	44 DP-1	44 DP-1
Description					PO4-P mg/l Sat.>	K mg/l Sat. Pas>	%SP Sat. Paste	pH Sat. Paste
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	33	34	35	36
1	UNTREATED CONTROL				102	23.10	155.00	250.0	7.60
					204	22.60	140.00	260.0	7.60
					303	22.80	131.00	270.0	7.60
					401				
					505				
					602				
					Mean =	22.83	142.00	260.0	7.60
2	EF Polymer	0.2%	w/w	A	103	18.90	279.00	270.0	7.80
					202	19.50	166.00	300.0	7.80
					301	18.00	106.00	260.0	7.70
					403				
					504				
					603				
					Mean =	18.80	183.67	276.7	7.77
3	EF Polymer	0.5%	w/w	A	104	16.90	44.40	250.0	7.90
					201	16.80	49.00	270.0	7.60
					305	20.60	114.00	290.0	7.70
					402				
					503				
					601				
					Mean =	18.10	69.13	270.0	7.73
4	EF Polymer	0.75%	w/w	A	101	12.50	85.30	350.0	7.90
					205	12.70	145.00	290.0	7.90
					304	14.70	89.70	320.0	7.90
					405				
					502				
					604				
					Mean =	13.30	106.67	320.0	7.90
5	EF Polymer	1%	w/w	A	105	12.80	108.00	280.0	7.80
					203	13.60	110.00	270.0	7.90
					302	13.10	83.80	290.0	7.80
					404				
					501				
					605				
					Mean =	13.17	100.60	280.0	7.83

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Rating Date					Jun-19-2026	Jun-19-2026	Jun-19-2026	Jun-19-2026
Part Rated					SOIL, C	SOIL, C	SOIL, C	SOIL, C
Rating Type					ELCOND	CONNO3	CONNUT	CONK
Rating Unit					DS/M	mg/L	mg/L	mg/L
Sample Size					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Collection Basis								
Number of Subsamples					1	1	1	1
Crop ID Code					1, CPSAN	1, CPSAN	1, CPSAN	1, CPSAN
BBCH Scale					BVSO	BVSO	BVSO	BVSO
Crop Scientific Name					Capsicum annuum	Capsicum annuum	Capsicum annuum	Capsicum annuum
Crop Name					Bell Pepper	Bell Pepper	Bell Pepper	Bell Pepper
Crop Variety					Banana pepper	Banana pepper	Banana pepper	Banana pepper
Days After First/Last Appl.					45, 45	45, 45	45, 45	45, 45
Treatment Appl. Interval					45 DA-A	45 DA-A	45 DA-A	45 DA-A
Planting Interval					44 DP-1	44 DP-1	44 DP-1	44 DP-1
Description					EC dS/m Sat. Pa>	NO-3-N mg/l Sat>	PO4-P mg/l Sat.>	K mg/l Sat. Pas>
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	37	38	39	40
1	UNTREATED CONTROL				102	1.140	0.20	17.20	104.00
					204	1.080	0.20	17.40	113.00
					303	1.050	0.20	16.00	82.80
					401				
					505				
					602				
					Mean =	1.090	0.20	16.87	99.93
2	EF Polymer	0.2%	w/w	A	103	0.980	0.30	17.20	110.00
					202	0.840	0.20	13.80	65.00
					301	1.080	0.20	15.10	107.00
					403				
					504				
					603				
					Mean =	0.967	0.23	15.37	94.00
3	EF Polymer	0.5%	w/w	A	104	0.980	0.20	17.10	122.00
					201	1.060	0.30	15.40	91.10
					305	1.050	0.10	14.20	78.50
					402				
					503				
					601				
					Mean =	1.030	0.20	15.57	97.20
4	EF Polymer	0.75%	w/w	A	101	0.860	0.20	11.20	46.00
					205	1.030	0.30	11.30	51.80
					304	1.100	0.20	12.30	90.00
					405				
					502				
					604				
					Mean =	0.997	0.23	11.60	62.60
5	EF Polymer	1%	w/w	A	105	1.060	0.20	12.20	51.70
					203	0.930	0.20	13.00	61.00
					302	1.000	0.30	12.60	58.90
					404				
					501				
					605				
					Mean =	0.997	0.23	12.60	57.20

SynTech Research USA

EF Polymer Irrigation Reduction Trial- Pepper-GH- California-2026

Trial ID:26-US-POLYMER-Pepper-CA
Protocol ID:26-US-POLYMER-Pepper-CA Location: Trial Year:2026

Study Director:Parsa Tehranchian Sponsor Contact:Toby Adjuik
Investigator:

Part Rated
SOIL = soil
PLANT = plant
LEAF = leaf
C = Crop is Part Rated

Rating Type
WEIGHT = weight
MOICON = moisture content|%PROPORTION
CONNUT = content - nutrient
PH = pH
ELCOND = electrical conductivity
CONNO3 = content - nitrate
CONK = content - potassium
HEIGHT = height
COPLPA = count - plant part

Rating Unit
g, , , = gram|WEIGHT
%, , , = percent|PERCENT
PH, , , = ph|PH
DS/M, , , = decisiemens/meter (equivalent to millimhos/cm)|CONDUCTIVITY
mg/L, , , = milligram/liter|CONCENTRATION
IN, , , = inch|LENGTH
NUMBER, , , = number|COUNT

PLOT = total plot
PLANT = plant/plant biomass/shrub

PLANT = plant/plant biomass/shrub

Crop ID Code
1, CPSAN, BVSO, Capsicum annuum, Bell Pepper, Banana pepper, = May-6-2026|seeded by hand|by hand|2.25|IN

Planting Interval
0 DP-1 = 1 CPSAN May-6-2026
6 DP-1 = 1 CPSAN May-6-2026
13 DP-1 = 1 CPSAN May-6-2026
27 DP-1 = 1 CPSAN May-6-2026
41 DP-1 = 1 CPSAN May-6-2026
42 DP-1 = 1 CPSAN May-6-2026

Additional Treatment Information

Rate Unit
% W/W = Percent, Weight Product per Weight Mix Basis (Metric=same)|0



Figure1: Plant height differences among the treatments at 45 days after seeding.



Figure 2: Plant height – Treatment 1 (UTC) – 45 days after seeding.



Figure 3: Plant height – Treatment 2 (0.2% EP) – 45 days after seeding.



Figure 4: Plant height – Treatment 3 (0.5% EP) – 45 days after seeding.



Figure 5: Plant height – Treatment 4 (0.75% EP) – 45 days after seeding.



Figure 6: Plant height – Treatment 5 (1% EP) – 45 days after seeding.