

# University of Georgia

## STEADFAST Q AND CALLISTO WITH/WITHOUT PROWL H2O

Trial ID: CN-16-23  
 Protocol ID: CN-16-23 Location: Trial Year: 2023  
 Project ID: Project ID 2: Project ID 3:  
 Study Director: Sponsor Contact:  
 Investigator: ERIC P. PROSTKO

Reps: 4 Plots: 6 by 25 feet  
 Appl. Amount: 15 GAL/AC Mix Size: 1.5 L (total for 4 plots; minimum=0.782 L)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Appl Code	Appl Timing	Amt Product to Measure	Diluent	Rep			
										1	2	3	4
1	STEADFAST Q	37.7	DG	1.5	oz/a	A	EPOST	1.123 g/mx	1445.1 mL	101	202	301	405
	AATREX	4	L	64.0	oz/a	A	EPOST	50.0 mL/mx					
	INDUCE			0.25	% v/v	A	EPOST	3.75 mL/mx					
	NO PROWL								-				
2	STEADFAST Q	37.7	DG	1.5	oz/a	A	EPOST	1.123 g/mx	1420.1 mL	102	205	304	403
	AATREX	4	L	64.0	oz/a	A	EPOST	50.0 mL/mx					
	INDUCE			0.25	% v/v	A	EPOST	3.75 mL/mx					
	PROWL H2O	3.8	SC	32.0	oz/a	A	EPOST	25.0 mL/mx					
3	ROUNDUP POWERMAX3	5.88	SL	22.0	oz/a	A	EPOST	17.19 mL/mx	1430.5 mL	103	201	302	401
	CALLISTO	4	SC	3.0	oz/a	A	EPOST	2.344 mL/mx					
	AATREX	4	SL	64.0	oz/a	A	EPOST	50.0 mL/mx					
	NO PROWL								-				
4	ROUNDUP POWERMAX3	5.88	SL	22.0	oz/a	A	EPOST	17.19 mL/mx	1405.5 mL	104	203	305	404
	CALLISTO	4	SC	3.0	oz/a	A	EPOST	2.344 mL/mx					
	AATREX	4	SL	64.0	oz/a	A	EPOST	50.0 mL/mx					
	PROWL H2O	3.8	SC	32.0	oz/a	A	EPOST	25.0 mL/mx					
5	NTC							-	105	204	303	402	

Sort Order: Replicate 1

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 Investigator: ERIC P. PROSTKO

**General Trial Information**

Study Director: \_\_\_\_\_ Title: \_\_\_\_\_  
 Investigator: ERIC P. PROSTKO Title: \_\_\_\_\_

Discipline: \_\_\_\_\_  
 Status: E  established

ARM Trial Created On: Mar-31-23 Meets All Objectives:  Reliability: \_\_\_\_\_  
 Initiation Date: \_\_\_\_\_ Planned Completion Date: \_\_\_\_\_ Interim Data Due: \_\_\_\_\_  
 Completion Date: \_\_\_\_\_ Last Possible Tour Visit: \_\_\_\_\_

**Trial Location**

City: \_\_\_\_\_ Country: \_\_\_\_\_  
 State/Prov.: \_\_\_\_\_ County: \_\_\_\_\_  
 Postal Code: \_\_\_\_\_ Climate Zone: \_\_\_\_\_

Latitude of LL Corner °: \_\_\_\_\_  
 Longitude of LL Corner °: \_\_\_\_\_  
 GPS Accuracy of LL Corner: \_\_\_\_\_  
 Altitude of LL Corner: \_\_\_\_\_  
 Angle y-axis to North °: \_\_\_\_\_

Directions: \_\_\_\_\_

Keywords: \_\_\_\_\_

**Regulations**

Test Facility: \_\_\_\_\_  
 GEP Accreditation Number: \_\_\_\_\_  
 GEP Accreditation Link: \_\_\_\_\_  
 Certificate Expiration: \_\_\_\_\_  
 Conducted Under GLP: No Official Trial ID: \_\_\_\_\_  
 Conducted Under GEP: No Official Protocol ID: \_\_\_\_\_  
 Study Rules: \_\_\_\_\_

No.	Destroyed?	Crop No.	Crop Code	Crop Stage	Part Destroyed	Explanation	Method	Destruction Date	Verified By
1.									

No.	Guideline	Discipline	Description
1.			

No.	Permit Number	Permit Description
1.		

**Objectives:** \_\_\_\_\_

**Materials and Methods**

**Results:** \_\_\_\_\_

**Conclusions:** \_\_\_\_\_

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 Investigator: ERIC P. PROSTKO

Contacts	
<b>Study Director:</b> Role: STYDIR study director Organization: _____ Address 1: _____ Address 2: _____ Country: _____ City: _____	Title: _____ Org. Type: _____ Phone No.: _____ Mobile No.: _____ E-mail: _____ State/Prov: _____ Postal Code: _____
<b>Investigator:</b> Role: INVEST investigator Organization: UGA Address 1: _____ Address 2: _____ Country: _____ City: _____	Title: _____ Org. Type: _____ Phone No.: _____ Mobile No.: _____ E-mail: _____ State/Prov: _____ Postal Code: _____
<b>Sponsor:</b> Role: SPONSR sponsor Organization: _____ Address 1: _____ Address 2: _____ Country: _____ City: _____	Title: _____ Org. Type: _____ Phone No.: _____ Mobile No.: _____ E-mail: _____ State/Prov: _____ Postal Code: _____
<b>Cooperator:</b> Role: COOPER cooperator Organization: _____ Address 1: _____ Address 2: _____ Country: _____ City: _____	Title: _____ Org. Type: _____ Phone No.: _____ Mobile No.: _____ E-mail: _____ State/Prov: _____ Postal Code: _____
<b>Contact Name 5:</b> Organization: _____ Address 1: _____ Address 2: _____ Country: _____ City: _____	Title: _____ Org. Type: _____ Phone No.: _____ Mobile No.: _____ E-mail: _____ State/Prov: _____ Postal Code: _____

Crop Description	
Crop 1: C ZEAMA Zea mays amylacea Entry Date: Mar-31-23 Variety: DYNAGRO D58VC65 Attributes: _____ Seed Shape: _____ Perennial Age: _____ Nursery Date: _____ Planting Date: Mar-30-23 Depth: 2 IN Rows per Plot: 2 Row Spacing: 36 IN Spacing within Row: _____ Soil Temperature: _____ Emergence Date: _____ Harvest Date: _____ Moisture Meter: _____ % Standard Moisture: 15.5 Weighing Equipment: _____	Flour corn Stage Scale: BBCH BBCH Scale: BCOR Seed Size: _____ Perennial Height: _____ Planting Rate: 33880 S/A Planting Method: _____ Planting Equipment: VP vacuum planter Seed Bed: _____ Soil Moisture: GOOD good Harvest Equipment: _____ Harvested Width: 6 FT Harvested Length: 25 FT

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**Pest Description**

<b>Pest 1 Type:</b> W	Code: AMAPA Common Name: Palmer amaranth Attributes: _____	Amaranthus palmeri	Entry Date: Mar-31-23 Stage Scale: BBCH Artificial Population: _
	Establishment Date: _____ Time: _____ Stage at Establishment: _____		
	Establishment Rate: _____		
	Concentration: _____		
	Establishment Method/Description: _____		
	Crop: _____ Stage at Infestation: _____		
<b>Pest 2 Type:</b> W	Code: RAPRA Common Name: Wild radish Attributes: _____	Raphanus raphanistrum	Entry Date: Mar-31-23 Stage Scale: BBCH Artificial Population: _
	Establishment Date: _____ Time: _____ Stage at Establishment: _____		
	Establishment Rate: _____		
	Concentration: _____		
	Establishment Method/Description: _____		
	Crop: _____ Stage at Infestation: _____		
<b>Pest 3 Type:</b> W	Code: LAMAM Common Name: Henbit deadnettle Attributes: _____	Lamium amplexicaule	Entry Date: Oct-20-23 Stage Scale: BBCH Artificial Population: _
	Establishment Date: _____ Time: _____ Stage at Establishment: _____		
	Establishment Rate: _____		
	Concentration: _____		
	Establishment Method/Description: _____		
	Crop: _____ Stage at Infestation: _____		
<b>Pest 4 Type:</b> W	Code: DEDTO Common Name: FLORIDA BEGGARWEED Attributes: _____	Desmodium tortuosum	Entry Date: Oct-20-23 Stage Scale: BBCH Artificial Population: _
	Establishment Date: _____ Time: _____ Stage at Establishment: _____		
	Establishment Rate: _____		
	Concentration: _____		
	Establishment Method/Description: _____		
	Crop: _____ Stage at Infestation: _____		

**Site and Design**

Treated Plot Width: 6 FT Site Type: \_\_\_\_\_  
 Treated Plot Length: 25 FT Experimental Unit: \_\_\_\_\_  
 Treated Plot Area: 150.0 FT<sup>2</sup> Tillage Type: \_\_\_\_\_  
 Replications: 4 Treatments: 5 Plots: 20 Study Design: FACTOR Factorial (RCB)  
 % Slope: \_\_\_\_\_

Trial Initiation Comments:

Location Quality:

No.	Previous Crop	Previous Pest Type	Previous Pest	Previous Pesticides	Year	Month	Comment
1.	PEANUT				2022		
2.							

**Maintenance**

No.	Date	Type	Maintenance Product Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit	Tank Mix (Yes/No)	Comment
1.											

Comment:



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**Application Description**

	<b>A</b>
<b>Date</b>	Apr-19-23
<b>Start Time</b>	
<b>Stop Time</b>	7:45 AM
<b>Standard</b>	
<b>Method</b>	BROADC
<b>Timing</b>	
<b>Placement</b>	FOLIAR
<b>Mixed/Prepared By</b>	EPP
<b>Applied By</b>	EPP
<b>Entry Date</b>	Oct-20-23
<b>Air Temperature Start, Stop</b>	, 51 F
<b>% Relative Humidity Start, Stop</b>	85,
<b>Wind Velocity+Dir. Start</b>	0 MPH,
<b>Wind Velocity+Dir. Stop</b>	
<b>Wind Velocity+Dir. Max</b>	
<b>Wet Leaves (Y/N)</b>	Y, yes
<b>Soil Temperature</b>	62 F
<b>Soil Temperature Depth</b>	
<b>Soil Moisture</b>	GOOD
<b>Soil Surface Condition</b>	
<b>% Ground Cover</b>	
<b>% Cloud Cover</b>	
<b>First Moisture Occurred On</b>	
<b>Time to First Moisture</b>	
<b>Amount of First Moisture</b>	
<b>Moisture 1 Week Before Appl.</b>	
<b>Moisture 6 Hours after Appl.</b>	
<b>Moisture 24 Hours after Appl.</b>	
<b>Moisture 1 Week after Appl.</b>	
<b>Problems with Application?</b>	

**Comment:**

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**Crop Stage At Each Application**

	A
<b>Crop 1 Code, BBCH Scale</b>	ZEAMA, BCOR
<b>Days after Emergence</b>	
<b>Stage Majority, Percent</b>	V3-V4,
<b>Stage Minimum, Percent</b>	
<b>Stage Maximum, Percent</b>	
<b>Diameter Average</b>	
<b>Diameter Minimum, Maximum</b>	
<b>Height Average</b>	6 IN
<b>Height Minimum, Maximum</b>	
<b>Density Average</b>	
<b>Density Minimum, Maximum</b>	
<b>Coverage</b>	

**Pest Stage At Each Application**

	A
<b>Pest 1 Code, Type, Scale</b>	AMAPA, W, BBCH
<b>Establishment Interval</b>	
<b>Stage Majority, Percent</b>	
<b>Stage Minimum, Percent</b>	
<b>Stage Maximum, Percent</b>	
<b>Diameter Average</b>	
<b>Diameter Minimum, Maximum</b>	
<b>Height Average</b>	IN
<b>Height Minimum, Maximum</b>	1, 2
<b>Relative Density</b>	
<b>Density Average</b>	
<b>Density Minimum, Maximum</b>	
<b>Coverage</b>	
<b>Crop Part Attacked, Code</b>	
<b>Pest 2 Code, Type, Scale</b>	RAPRA, W, BBCH
<b>Establishment Interval</b>	
<b>Stage Majority, Percent</b>	
<b>Stage Minimum, Percent</b>	
<b>Stage Maximum, Percent</b>	
<b>Diameter Average</b>	
<b>Diameter Minimum, Maximum</b>	
<b>Height Average</b>	IN
<b>Height Minimum, Maximum</b>	2, 3
<b>Relative Density</b>	
<b>Density Average</b>	
<b>Density Minimum, Maximum</b>	
<b>Coverage</b>	
<b>Crop Part Attacked, Code</b>	
<b>Pest 3 Code, Type, Scale</b>	LAMAM, W, BBCH
<b>Establishment Interval</b>	

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<b>Stage Majority, Percent</b>	
<b>Stage Minimum, Percent</b>	
<b>Stage Maximum, Percent</b>	
<b>Diameter Average</b>	
<b>Diameter Minimum, Maximum</b>	
<b>Height Average</b>	1 IN
<b>Height Minimum, Maximum</b>	
<b>Relative Density</b>	
<b>Density Average</b>	
<b>Density Minimum, Maximum</b>	
<b>Coverage</b>	
<b>Crop Part Attacked, Code</b>	
<b>Pest 4 Code, Type, Scale</b>	DEDTO, W, BBCH
<b>Establishment Interval</b>	
<b>Stage Majority, Percent</b>	
<b>Stage Minimum, Percent</b>	
<b>Stage Maximum, Percent</b>	
<b>Diameter Average</b>	
<b>Diameter Minimum, Maximum</b>	
<b>Height Average</b>	
<b>Height Minimum, Maximum</b>	
<b>Relative Density</b>	
<b>Density Average</b>	
<b>Density Minimum, Maximum</b>	
<b>Coverage</b>	
<b>Crop Part Attacked, Code</b>	

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**Application Equipment**

	A
Equipment Name	BACKPACK
Equipment Type	
Operation Pressure	36 PSI
Nozzle Model	TEEJET
Nozzle Type	AIXR
Nozzle TradeName	
Nozzle Tip Size, Color	11002,
Nozzle Spacing	20.0 IN
Nozzles/Row	
Nozzle Count	
Band Width	
Spray Swath	
% Coverage	
Boom ID	
Boom Length	60.0 IN
Boom Height	20.0 IN
Ground Speed	3.5 MPH
Carrier	WATER
Water Hardness (ppm CaCO3)	
Application Amount	15 GAL/AC
Mix Overage	
Mix Size	1.5
Spray pH	
Propellant	CO2
Tank Mix (Y/N)	

Equipment Comment:

**Treatment Appl. Comments**

Trt No Treatment Application Comment

**Notes**

Context	Date	By	Notes
STATUS	Mar-31-23	Eric P. Prostko	Automatically added by ARM: Trial Status updated to 'S' during trial creation.
STATUS	Mar-31-23	Eric P. Prostko	Automatically added by ARM: Status changed to: E: changed by (EGAPRE).
STATUS	Mar-31-23	Eric P. Prostko	Automatically added by ARM: Trial Status updated to 'E' when Planting Date entered.

**Deviations**

No. 1: Date: \_\_\_\_\_ By: \_\_\_\_\_

Deviations:

Reasons:

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**SE Definitions**

	1.
<b>Rating Timing</b>	
<b>SE Name</b>	
<b>SE Description</b>	
<b>Part Rated</b>	
<b>Rating Type</b>	
<b>Rating Unit/Min/Max</b>	
<b>Sample Size</b>	
<b>Collection Basis</b>	
<b>Reporting Basis</b>	
<b>Number of Subsamples</b>	
<b>Untreated Rating Type</b>	
<b>ARM Action Codes</b>	
<b>Pest Type, Code</b>	
<b>Crop Type, Code</b>	
<b>Required</b>	

**No. Task Comment**

1. \_\_\_\_

**Instructions:**

Yield Required: \_

**Geographic Area/Environmental Considerations:**

**Cropping Considerations:**

**Data to Collect:**

**Statistical Analysis:**

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Rating Date							Apr-26-23	Apr-26-23	Apr-26-23	Apr-26-23	Apr-26-23	Apr-26-23	May-4-23	May-4-23	May-4-23
Rating Type							Stunting	Bleaching	Necrosis	Control	Control	Control	Stunting	Chlorosis	Co trol
Rating Unit/Min/Max							%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Crop Name							Zeama	Zeama	Zeama	Rapra	Lamam	Molve	Zeama	Zeama	Amapa
Pest Name															
Pest Scientific Name															
Pest Code															
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Code	Appl Timing	1	2	3	4	5	6	7	8	9
1	STEADFAST Q	37.7	DG	1.5 oz/a	A	EPOST	10.0 a	1.3 bc	0.0 -	99.0 a	99.0 a	99.0 a	6.3 -	6.3 a	99.0 a
	AATREX	4	L	64.0 oz/a	A	EPOST									
	INDUCE			0.25 % v/v	A	EPOST									
	NO PROWL														
2	STEADFAST Q	37.7	DG	1.5 oz/a	A	EPOST	11.3 a	3.8 ab	0.0 -	99.0 a	99.0 a	99.0 a	6.3 -	3.8 ab	99.0 a
	AATREX	4	L	64.0 oz/a	A	EPOST									
	INDUCE			0.25 % v/v	A	EPOST									
	PROWL H2O	3.8	SC	32.0 oz/a	A	EPOST									
3	ROUNDUP POWERMAX3	5.88	SL	22.0 oz/a	A	EPOST	6.3 b	2.5 abc	1.3 -	99.0 a	99.0 a	99.0 a	2.5 -	5.0 ab	99.0 a
	CALLISTO	4	SC	3.0 oz/a	A	EPOST									
	AATREX	4	SL	64.0 oz/a	A	EPOST									
	NO PROWL														
4	ROUNDUP POWERMAX3	5.88	SL	22.0 oz/a	A	EPOST	0.0 c	5.0 a	2.5 -	99.0 a	99.0 a	99.0 a	3.8 -	2.5 bc	99.0 a
	CALLISTO	4	SC	3.0 oz/a	A	EPOST									
	AATREX	4	SL	64.0 oz/a	A	EPOST									
	PROWL H2O	3.8	SC	32.0 oz/a	A	EPOST									
5	NTC						0.0 c	0.0 c	0.0 -	0.0 b	0.0 b	0.0 b	0.0 -	0.0 c	0.0 b
	LSD P=.10						3.30	2.76	1.99	.	.	.	4.85	3.40	.
	Standard Deviation						2.62	2.19	1.58	0.00	0.00	0.00	3.85	2.70	0.00
	CV						47.67	87.56	210.82	0.0	0.0	0.0	102.56	77.15	0.0
	Grand Mean						5.50	2.50	0.75	79.20	79.20	79.20	3.75	3.50	79.20

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Could not calculate LSD (% mean diff) for columns 4,5,6,9,10,11,12,13,14,15 because error mean square = 0.  
 ^Calculated from residual.

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Rating Date	Rating Type	Rating Unit/Min/Max	Crop Name	Pest Name	Pest Scientific Name	Pest Code	May-4-23 Control %, 0, 100	May-4-23 Control %, 0, 100	May-4-23 Control %, 0, 100	May-19-23 Stunting %, 0, 100 Zeama	May-19-23 Control %, 0, 100	May-19-23 Control %, 0, 100	Aug-14-23 TWC %, 0, 100	Aug-14-23 Control %, 0, 100	Aug-14-23 Control %, 0, 100	
							Rapra	Lamam	Molve		Amapa	Rapra	PERCENT COVER TOTAL	AMAPA Amapa	DEDTO Dedto	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Code	Appl Timing	10	11	12	13	14	15	16	17	18
1	STEADFAST Q	37.7	DG	1.5 oz/a	A	EPOST		99.0 a	99.0 a	99.0 a	0.0 -	99.0 a	99.0 a	51.3 b	96.8 a	40.0 c
	AATREX	4	L	64.0 oz/a	A	EPOST										
	INDUCE			0.25 % v/v	A	EPOST										
	NO PROWL															
2	STEADFAST Q	37.7	DG	1.5 oz/a	A	EPOST		99.0 a	99.0 a	99.0 a	0.0 -	99.0 a	99.0 a	36.3 b	98.0 a	65.0 b
	AATREX	4	L	64.0 oz/a	A	EPOST										
	INDUCE			0.25 % v/v	A	EPOST										
	PROWL H2O	3.8	SC	32.0 oz/a	A	EPOST										
3	ROUNDUP POWERMAX3	5.88	SL	22.0 oz/a	A	EPOST		99.0 a	99.0 a	99.0 a	0.0 -	99.0 a	99.0 a	92.5 a	97.0 a	0.0 d
	CALLISTO	4	SC	3.0 oz/a	A	EPOST										
	AATREX	4	SL	64.0 oz/a	A	EPOST										
	NO PROWL															
4	ROUNDUP POWERMAX3	5.88	SL	22.0 oz/a	A	EPOST		99.0 a	99.0 a	99.0 a	0.0 -	99.0 a	99.0 a	46.3 b	97.0 a	50.0 bc
	CALLISTO	4	SC	3.0 oz/a	A	EPOST										
	AATREX	4	SL	64.0 oz/a	A	EPOST										
	PROWL H2O	3.8	SC	32.0 oz/a	A	EPOST										
5	NTC							0.0 b	0.0 b	0.0 b	0.0 -	0.0 b	0.0 b	100.0 a	0.0 b	96.0 a
	LSD P=.10							.	.	.	.	.	.	18.43	2.63	21.22
	Standard Deviation							0.00	0.00	0.00	0.00	0.00	0.00	14.63	2.09	16.84
	CV							0.0	0.0	0.0	0.0	0.0	0.0	22.42	2.68	33.54
	Grand Mean							79.20	79.20	79.20	0.00	79.20	79.20	65.25	77.75	50.20

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Could not calculate LSD (% mean diff) for columns 4,5,6,9,10,11,12,13,14,15 because error mean square = 0.  
 ^Calculated from residual.

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## STEADFAST Q AND CALLISTO WITH/WITHOUT PROWL H20

Trial ID: CN-16-23  
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 Investigator: ERIC P. PROSTKO

							Sep-6-23	Sep-6-23	
							YIELD	YIELD	
							BU, -, -	YIELD	
Rating Date									
Rating Type									
Rating Unit/Min/Max									
Crop Name									
Pest Name									
Pest Scientific Name									
Pest Code									
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Code	Appl Timing		
1	STEADFAST Q	37.7	DG	1.5	oz/a	A	EPOST	51.0	a
	AATREX	4	L	64.0	oz/a	A	EPOST		
	INDUCE			0.25	% v/v	A	EPOST		
	NO PROWL								
2	STEADFAST Q	37.7	DG	1.5	oz/a	A	EPOST	50.8	a
	AATREX	4	L	64.0	oz/a	A	EPOST		
	INDUCE			0.25	% v/v	A	EPOST		
	PROWL H20	3.8	SC	32.0	oz/a	A	EPOST		
3	ROUNDUP POWERMAX3	5.88	SL	22.0	oz/a	A	EPOST	49.0	a
	CALLISTO	4	SC	3.0	oz/a	A	EPOST		
	AATREX	4	SL	64.0	oz/a	A	EPOST		
	NO PROWL								
4	ROUNDUP POWERMAX3	5.88	SL	22.0	oz/a	A	EPOST	50.3	a
	CALLISTO	4	SC	3.0	oz/a	A	EPOST		
	AATREX	4	SL	64.0	oz/a	A	EPOST		
	PROWL H20	3.8	SC	32.0	oz/a	A	EPOST		
5	NTC							39.3	b
	LSD P=.10							4.31	22.5
	Standard Deviation							3.42	17.9
	CV							7.12	7.12
	Grand Mean							48.05	250.9

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Could not calculate LSD (% mean diff) for columns 4,5,6,9,10,11,12,13,14,15 because error mean square = 0.  
 ^Calculated from residual.

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## STEADFAST Q AND CALLISTO WITH/WITHOUT PROWL H2O

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 Investigator: ERIC P. PROSTKO

**Factorial (RCB) AOV For Apr-26-23 Stunting % 0 100 Zeama (Data Column 1)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	595.000000			
Replicate	3	55.000000	18.333333	2.667	0.0951
Treatment	4	457.500000	114.375000	16.636	0.0001
Error	12	82.500000	6.875000		

**Factorial (RCB) AOV For Apr-26-23 Bleaching % 0 100 Zeama (Data Column 2)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	125.000000			
Replicate	3	5.000000	1.666667	0.348	0.7914
Treatment	4	62.500000	15.625000	3.261	0.0499
Error	12	57.500000	4.791667		

**Factorial (RCB) AOV For Apr-26-23 Necrosis % 0 100 Zeama (Data Column 3)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	63.750000			
Replicate	3	13.750000	4.583333	1.833	0.1948
Treatment	4	20.000000	5.000000	2.000	0.1586
Error	12	30.000000	2.500000		

**Factorial (RCB) AOV For Apr-26-23 Control % 0 100 Rapra (Data Column 4)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

**Factorial (RCB) AOV For Apr-26-23 Control % 0 100 Lamam (Data Column 5)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

**Factorial (RCB) AOV For Apr-26-23 Control % 0 100 Molve (Data Column 6)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

**Factorial (RCB) AOV For May-4-23 Stunting % 0 100 Zeama (Data Column 7)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	343.750000			
Replicate	3	53.750000	17.916667	1.211	0.3477
Treatment	4	112.500000	28.125000	1.901	0.1750
Error	12	177.500000	14.791667		

**Factorial (RCB) AOV For May-4-23 Chlorosis % 0 100 Zeama (Data Column 8)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	205.000000			
Replicate	3	25.000000	8.333333	1.143	0.3713
Treatment	4	92.500000	23.125000	3.171	0.0539
Error	12	87.500000	7.291667		

**Factorial (RCB) AOV For May-4-23 Control % 0 100 Amapa (Data Column 9)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

**Factorial (RCB) AOV For May-4-23 Control % 0 100 Rapra (Data Column 10)**

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

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Factorial (RCB) AOV For May-4-23 Control % 0 100 Lamam (Data Column 11)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

Factorial (RCB) AOV For May-4-23 Control % 0 100 Molve (Data Column 12)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

Factorial (RCB) AOV For May-19-23 Stunting % 0 100 Zeama (Data Column 13)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	0.000000000000			
Replicate	3	0.000000000000	0.000000000000	0.000	1.0000
Treatment	4	0.000000000000	0.000000000000	0.000	1.0000
Error	12	0.000000000000	0.000000000000		

Factorial (RCB) AOV For May-19-23 Control % 0 100 Amapa (Data Column 14)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

Factorial (RCB) AOV For May-19-23 Control % 0 100 Rapra (Data Column 15)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	31363.200000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	4	31363.200000	7840.800000	0.000	1.0000
Error	12	0.000000	0.000000		

Factorial (RCB) AOV For Aug-14-23 TWC % 0 100 PERCENT COVER TOTAL (Data Column 16)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	19723.750000			
Replicate	3	3763.750000	1254.583333	5.864	0.0105
Treatment	4	13392.500000	3348.125000	15.648	0.0001
Error	12	2567.500000	213.958333		

Factorial (RCB) AOV For Aug-14-23 Control % 0 100 AMAPA Amapa (Data Column 17)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	30333.750000			
Replicate	3	52.550000	17.516667	4.027	0.0339
Treatment	4	30229.000000	7557.250000	1737.299	0.0001
Error	12	52.200000	4.350000		

Factorial (RCB) AOV For Aug-14-23 Control % 0 100 DEDTO Dedto (Data Column 18)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	25025.200000			
Replicate	3	1860.400000	620.133333	2.188	0.1424
Treatment	4	19763.200000	4940.800000	17.430	0.0001
Error	12	3401.600000	283.466667		

Factorial (RCB) AOV For Sep-6-23 YIELD (Data Column 19)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	574.950000			
Replicate	3	37.750000	12.583333	1.075	0.3965
Treatment	4	396.700000	99.175000	8.470	0.0017
Error	12	140.500000	11.708333		

Factorial (RCB) AOV For Sep-6-23 YIELD BU YIELD (Data Column 20)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	19	15672.480779			
Replicate	3	1029.021914	343.007305	1.075	0.3965
Treatment	4	10813.589225	2703.397306	8.470	0.0017
Error	12	3829.869640	319.155803		

Rating Type  
 YIELD = yield  
 Rating Unit/Min/Max  
 %, 0, 100 = percent

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## STEADFAST Q AND CALLISTO WITH/WITHOUT PROWL H2O

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BU, = bushel  
ARM Action Codes  
TY1 = 5.22100169\*[19]





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 Investigator: ERIC P. PROSTKO

Rating Date							Aug-14-23	Aug-14-23	Sep-6-23	Sep-6-23
Rating Type							Control	Control		YIELD
Rating Unit/Min/Max							%, 0, 100	%, 0, 100		BU, -, -
Crop Name									YIELD	YIELD
Pest Name							AMAPA	DEDTO		
Pest Scientific Name							Amapa	Dedto		
Pest Code										
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Appl Unit	Appl Code	17	18	19	20
1	STEADFAST Q	37.7	DG	1.5	oz/a	A EPOST 101	99.0	50.0	52.0	271
	AATREX	4	L	64.0	oz/a	A EPOST 202	99.0	50.0	53.0	277
	INDUCE			0.25	% v/v	A EPOST 301	90.0	25.0	48.0	251
	NO PROWL					405	99.0	35.0	51.0	266
						Mean =	96.8	40.0	51.0	266
2	STEADFAST Q	37.7	DG	1.5	oz/a	A EPOST 102	99.0	65.0	51.0	266
	AATREX	4	L	64.0	oz/a	A EPOST 205	99.0	50.0	56.0	292
	INDUCE			0.25	% v/v	A EPOST 304	95.0	50.0	51.0	266
	PROWL H2O	3.8	SC	32.0	oz/a	A EPOST 403	99.0	95.0	45.0	235
						Mean =	98.0	65.0	50.8	265
3	ROUNDUP POWERMAX3	5.88	SL	22.0	oz/a	A EPOST 103	99.0	0.0	53.0	277
	CALLISTO	4	SC	3.0	oz/a	A EPOST 201	99.0	0.0	51.0	266
	AATREX	4	SL	64.0	oz/a	A EPOST 302	95.0	0.0	47.0	245
	NO PROWL					401	95.0	0.0	45.0	235
						Mean =	97.0	0.0	49.0	256
4	ROUNDUP POWERMAX3	5.88	SL	22.0	oz/a	A EPOST 104	99.0	75.0	51.0	266
	CALLISTO	4	SC	3.0	oz/a	A EPOST 203	95.0	60.0	49.0	256
	AATREX	4	SL	64.0	oz/a	A EPOST 305	95.0	0.0	54.0	282
	PROWL H2O	3.8	SC	32.0	oz/a	A EPOST 404	99.0	65.0	47.0	245
						Mean =	97.0	50.0	50.3	262
5	NTC					105	0.0	95.0	35.0	183
						204	0.0	99.0	41.0	214
						303	0.0	95.0	38.0	198
						402	0.0	95.0	43.0	225
						Mean =	0.0	96.0	39.3	205

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Rating Type  
YIELD = yield  
Rating Unit/Min/Max  
%, 0, 100 = percent  
BU, , = bushel  
ARM Action Codes  
TY1 = 5.22100169\*[19]