

# University of Georgia

## Sweetcorn tolerance to Impact and Callisto

Trial ID: Veg60-06  
 Location: Ponder 5120

Study Dir.: Andrew MacRae  
 Investigator: Stanley Culpepper

Reps: 4                      Plots: 6 by 25 feet  
 Spray vol: 14.8 gal/ac      Mix size: 1.5 liters (min .9646)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep			
									1	2	3	4
1	Impact NIS	2.8	LB/GAL	SC	1.5	OZ/A	4 leaf A	1.188 ml/mx	101	207	306	403
					0.25	% V/V	4 leaf A	3.75 ml/mx				
2	Impact COC	2.8	LB/GAL	SC	1.5	OZ/A	4 leaf A	1.188 ml/mx	102	201	302	408
					1	% V/V	4 leaf A	15.0 ml/mx				
3	Impact UAN NIS	2.8	LB/GAL	SC	1.5	OZ/A	4 leaf A	1.188 ml/mx	103	210	304	402
					2.5	% V/V	4 leaf A	37.5 ml/mx				
					0.25	% V/V	4 leaf A	3.75 ml/mx				
4	Impact UAN COC	2.8	LB/GAL	SC	1.5	OZ/A	4 leaf A	1.188 ml/mx	104	209	303	409
					2.5	% V/V	4 leaf A	37.5 ml/mx				
					1	% V/V	4 leaf A	15.0 ml/mx				
5	Callisto NIS	4	LB/GAL	SC	3	OZ/A	4 leaf A	2.375 ml/mx	105	208	305	410
					0.25	% V/V	4 leaf A	3.75 ml/mx				
6	Callisto COC	4	LB/GAL	SC	3	OZ/A	4 leaf A	2.375 ml/mx	106	204	307	404
					1	% V/V	4 leaf A	15.0 ml/mx				
7	Callisto NIS UAN	4	LB/GAL	SC	3	OZ/A	4 leaf A	2.375 ml/mx	107	205	301	406
					0.25	% V/V	4 leaf A	3.75 ml/mx				
					2.5	% V/V	4 leaf A	37.5 ml/mx				
8	Callisto COC UAN	4	LB/GAL	SC	3	OZ/A	4 leaf A	2.375 ml/mx	108	202	308	407
					1	% V/V	4 leaf A	15.0 ml/mx				
					2.5	% V/V	4 leaf A	37.5 ml/mx				
9	Weed-free Check UAN				2.5	% V/V	4 leaf A	37.5 ml/mx	109	206	310	405
10	Weed-free Check								110	203	309	401

Sort Order: Treatment

Product quantities required for listed treatments and applications in one trial:

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
5.939	ml	Impact	2.8	SC	
18.748	ml	NIS			
74.992	ml	COC			
234.350	ml	UAN			
11.877	ml	Callisto	4	SC	

\* 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1.5 liters (mix size basis).  
 \* Product amount calculations increased 25 % for overage adjustment.  
 \* 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 1.5 liters.

Trial Comments

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Crop Code			ZEAMS	ZEAMS	ZEAMS
Rating Data Type			Injury	Injury	Injury
Rating Unit			%	%	%
Rating Date			May-03-06	May-11-06	May-29-06
Crop Stage			5 leaf	7 leaf	
Assessed By			AWM	AWM	AWM
Trt-Eval Interval			9 DA-A	17 DA-A	35 DA-A
Trt No.	Treatment Name	Rate	1	2	3
		Unit			
1	Impact NIS	1.5 OZ/A 0.25 % V/V	0 b	0 b	0 a
2	Impact COC	1.5 OZ/A 1 % V/V	0 b	0 b	0 a
3	Impact UAN NIS	1.5 OZ/A 2.5 % V/V 0.25 % V/V	0 b	0 b	0 a
4	Impact UAN COC	1.5 OZ/A 2.5 % V/V 1 % V/V	0 b	0 b	0 a
5	Callisto NIS	3 OZ/A 0.25 % V/V	0 b	0 b	0 a
6	Callisto COC	3 OZ/A 1 % V/V	1 ab	1 ab	0 a
7	Callisto NIS UAN	3 OZ/A 0.25 % V/V 2.5 % V/V	0 b	1 b	0 a
8	Callisto COC UAN	3 OZ/A 1 % V/V 2.5 % V/V	2 a	2 a	0 a
9	Weed-free Check UAN	2.5 % V/V	0 b	0 b	0 a
10	Weed-free Check		0 b	0 b	0 a
LSD (P=.05)			1.1	1.2	0.0
Standard Deviation			0.8	0.8	0.0
CV			311.75	169.37	0.0
Bartlett's X2			9.323	10.289	0.0
P(Bartlett's X2)			0.009*	0.067	.

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)



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	Previous Crops	Previous Pesticides	Year
1.			

### MAINTENANCE

**Field Prep./Maintenance:** Land was strip-tilled and sweet corn planted. 500 lbs/A of 5-10-15 fertilizer was incorporated into the field. 12-leaf corn was sidedressed with 200 lbs of 34-0-0. Bicep II Magnum at 2 qt/A plus Gramoxone Max at 1 qt/A plus COC at 1% v/v was applied PRE and Prowl H2O at 1 qt was applied at spike to maintain plots free of weeds.

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.							

### SOIL DESCRIPTION

% Sand: 94      % OM: 1.3      Texture: Sand  
 % Silt: 4        pH: 6.2        Soil Name: Tifton Sandy Loam  
 % Clay: 2       CEC: \_\_\_\_\_      Fert. Level: \_\_\_\_\_

### ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

### MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: Irrigated

Closest Weather Station: \_\_\_\_\_ Distance: \_\_\_\_\_ Unit: \_\_\_\_

### APPLICATION DESCRIPTION

	A
Application Date:	Apr-24-06
Time of Day:	17:30
Application Method:	Broadcast
Application Timing:	4 leaf
Applic. Placement:	4 inches
Air Temp., Unit:	86 F
% Relative Humidity:	48
Wind Velocity, Unit:	4 mph
Dew Presence (Y/N):	N
Water Hardness:	NA
Soil Temp., Unit:	93 F
Soil Moisture:	Slight
% Cloud Cover:	30

### CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	ZEAMS
Stage Scale:	4 leaf
Height, Unit:	10 inch
Crop 2 Code, Stage:	ZEAMS
Stage Scale:	4 leaf
Height, Unit:	10 inch

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## WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	
Stage Scale:	
Density, Unit:	

## APPLICATION EQUIPMENT

	A
Appl. Equipment:	CO2 Spray
Operating Pressure:	23 psi
Nozzle Type:	TeeJet
Nozzle Size:	11002XR
Nozzle Spacing, Unit:	18 in
Nozzles/Row:	2
Band Width, Unit:	6 ft
Boom Length, Unit:	54 in
Boom Height, Unit:	15 in
Ground Speed, Unit:	3 mph
Incorporation Equip.:	
Hours to Incorp.:	
Incorp. Depth, Unit:	
Carrier:	water
Spray Volume, Unit:	14.8 gpa
Spray pH:	
Propellant:	CO2
Tank Mix (Y/N):	N

Trt No	Treatment Application Comment