

## Common Pokeweed Control in Corn.

02-Poke-Corn

**OBJECTIVE:** Evaluate the efficacy of postemergence broadleaf herbicides in corn on common pokeweed to develop control recommendations.

**SUMMARY:** Common pokeweed control at 14 days after the 6 to 8 inch corn application was 64 to 65% with Lightning or Callisto and 78 to 80% from treatments that included dicamba (Distinct, Clarity, Celebrity Plus). However, when herbicide applications were delayed until corn was 20 to 24 inches in height, common pokeweed control 14 days after treatment was only 40 to 55% from treatments containing dicamba. Common pokeweed control 14 days after treatment was 65% from Callisto regardless of application timing. By 56 days after the 20 to 24 inch application timing, common pokeweed control was at least 91% from all herbicide treatments applied when corn was 6 to 8 inches. Common pokeweed control 56 days after treatment was 71 to 80% from Lightning and treatments containing dicamba applied when corn was 20 to 24 inches and 94% from Callisto.

### HERBICIDES

CALLISTO 4 SC  
CELEBRITY PLUS 70 WG  
CLARITY 4 EC  
DISTINCT 70 WG  
LIGHTNING 70 WG

### WEEDS

pokeweed, common

### CROP

corn, field

Bryan Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

## Common Pokeweed Control in Corn.

Project Code: 02-Poke-Corn Location: Eldorado, IL

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

City State Zip Country: Eldorado IL 62930 USA  
 Trial Status: Final Updated: 11-4-02

**Objective:**

Evaluate the efficacy of postemergence broadleaf herbicides in corn on common pokeweed to develop control recommendations.

**Weed Code Common Name Scientific Name**  
 1. PHTAM pokeweed, common Phytolacca americana L.

Crop 1: ZEAMX corn, field  
 Planting Method: Seeded  
 Rate: 28000 S/A Depth: 1.5 IN  
 Row Spacing: 30 IN Seed Bed: No-till

Plot Width, Unit: 10 FT Plot Length, Unit: 40 FT Reps: 4  
 Tillage Type: No-Till Study Design: Randomized complete block

**APPLICATION DESCRIPTION**

	A	B
Application Date:	6-14-02	6-25-02
Time of Day:	13:00	11:00
Application Method:	Spray	Spray
Application Timing:	6-8"CN	20-24"CN
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	74 F	90 F
% Relative Humidity:	35	65
Wind Velocity, Unit:	7-10 MPH	2 MPH
Dew Presence (Y/N):	N	N
Soil Temp., Unit:	73 F	81 F
Soil Moisture:	NORMAL	BELNOR
% Cloud Cover:	15	10

**CROP STAGE AT EACH APPLICATION**

	A	B
Crop 1 Code, Stage:	ZEAMX V3-V4	ZEAMX V5-V6
Height, Unit:	9-12 IN	18-26 IN

**WEED STAGE AT EACH APPLICATION**

	A	B
Weed 1 Code:	PHTAM	PHTAM
Stage(leaves):	5-50+	2-50+
Height(inches):	3-40	3-46
Density:	Medium	High

**APPLICATION EQUIPMENT**

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	8003	8003
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA

**NOTES:**

Nozzels were 8003 to reduce drift.  
 This study was not harvested.

Common Pokeweed Control in Corn.

Project Code: 02-Poke-Corn Location: Eldorado, IL

									ZEAMX	ZEAMX	ZEAMX	ZEAMX	PHTAM	PHTAM	PHTAM	PHTAM	PHTAM	
									Injury	Injury	Injury	Injury	Control	Control	Control	Control	Control	
									Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
									6-28-02	7-9-02	7-23-02	8-20-02	6-28-02	7-9-02	7-23-02	8-20-02	10-18-02	
									14 DA-A	14 DA-B	28 DA-B	56 DAT	14 DA-A	14 DA-B	28 DA-B	56 DAT	EOS	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code									
1	LIGHTNING	70	WG	0.056	LB A/A	1.28	OZ/A	6-8"CN	A	0	0	0	0	64	63	92	95	88
1	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	6-8"CN	A									
1	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	6-8"CN	A									
2	LIGHTNING	70	WG	0.056	LB A/A	1.28	OZ/A	20-24"CN	B	0	0	0	0	49	64	79	84	
2	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	20-24"CN	B									
2	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	20-24"CN	B									
3	DISTINCT	70	WG	0.175	LB A/A	4	OZ/A	6-8"CN	A	0	0	0	0	80	75	80	92	82
3	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	6-8"CN	A									
3	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	6-8"CN	A									
4	DISTINCT	70	WG	0.175	LB A/A	4	OZ/A	20-24"CN	B	0	0	0	0	54	75	80	79	
4	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	20-24"CN	B									
4	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	20-24"CN	B									
5	CLARITY	4	EC	0.25	LB A/A	8	OZ/A	6-8"CN	A	0	0	0	0	78	70	75	93	83
5	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	6-8"CN	A									
5	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	6-8"CN	A									
6	CLARITY	4	EC	0.25	LB A/A	8	OZ/A	20-24"CN	B	0	0	0	0	40	71	71	83	
6	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	20-24"CN	B									
6	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	20-24"CN	B									
7	CELEBRITY PLUS	70	WG	0.206	LB A/A	4.7	OZ/A	6-8"CN	A	0	0	0	0	80	75	92	91	86
7	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	6-8"CN	A									
7	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	6-8"CN	A									
8	CELEBRITY PLUS	70	WG	0.206	LB A/A	4.7	OZ/A	20-24"CN	B	0	0	0	0	55	84	79	75	
8	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	20-24"CN	B									
8	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	20-24"CN	B									
9	CALLISTO	4	SC	0.094	LB A/A	3	OZ/A	6-8"CN	A	0	0	0	0	65	91	97	95	84
9	PRIME OIL COC	100	LIQ	1.0	% V/V	1	% V/V	6-8"CN	A									
9	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	6-8"CN	A									
10	CALLISTO	4	SC	0.094	LB A/A	3	OZ/A	20-24"CN	B	0	0	0	0	65	90	94	89	
10	PRIME OIL COC	100	LIQ	1.0	% V/V	1	% V/V	20-24"CN	B									
10	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	20-24"CN	B									
11	NONTREATED									0	0	0	0	0	0	0	0	0
LSD (P=.05)										0.0	0.0	0.0	0.0	10.7	7.5	6.2	7.8	10.1

Weed Code					PHTAM	PHTAM	PHTAM	PHTAM	PHTAM
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX					
Rating Data Type	Injury	Injury	Injury	Injury	Control	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Date	6-28-02	7-9-02	7-23-02	8-20-02	6-28-02	7-9-02	7-23-02	8-20-02	10-18-02
Trt-Eval Interval	14 DA-A	14 DA-B	28 DA-B	56 DAT	14 DA-A	14 DA-B	28 DA-B	56 DAT	EOS

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code
Replicate F		0.000		0.000		0.000		0.000	0.241
Replicate Prob(F)		1.0000		1.0000		1.0000		1.0000	0.8666
Treatment F		0.000		0.000		0.000		0.000	75.091
Treatment Prob(F)		1.0000		1.0000		1.0000		1.0000	0.0001

Common Pokeweed Control in Corn.

Project Code: 02-Poke-Corn      Location: Eldorado, IL

Trial Comments

1. Protocol: ISPOB.
2. Blanket early preplant application of Princep + Aatrex at 1.0 + 1.0 lbai/A to all plots.
3. DA-B = days after 20-24"CN application. EOS = end of season.