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Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

General Trial Information

Study Director: Joe Bruce Title: Technical Service Manager

Discipline: H herbicide
 Status: E established Usage/Type: DEV Development/Registration
 ARM Trial Created On: Mar-25-2022
 Initiation Date: May-1-2022 Planned Completion Date: Sep-1-2022

Trial Location

Address (Location): 7721 South Charleston Pike
 City: South Charleston Country: USA United States
 State/Prov.: Ohio
 Postal Code: 45368

Latitude of LL Corner °: 39.85937 N
 Longitude of LL Corner °: -83.67386 W
 Altitude of LL Corner: 1086.00 FT

Conducted Under GLP: No
 Conducted Under GEP: No
 None

Contacts

Role: STYDIR study director
 Study Director: Joe Bruce Title: Technical Service Manager
 Organization: AMVAC Chemical Corporation
 Address 1: 44 Waterford Ln Mobile No.: 224-319-2000
 Country: USA United States E-mail: joeb@amvac.com
 City: Glen Carbon State/Prov: Illinois Postal Code: 62034

Crop Description

Crop 1: CZEAMXZea mays Corn BBCH Scale: BCOR
 Entry Date: May-3-2022 Crop Group: 15 Stage Scale: BBCH
 Variety: Pioneer P1077AM Maturity Group: 110
 Attributes: Glyphosate-R, Glufosinate-R
 Seed Lot No: A3YOR13002-N Seed Source: Pioneer
 % Germination: 95 1000 Grain Weight: 0.63 LB
 Seed Size: 1588 S/LB
 Planting Date: May-2-2022 Planting Rate: 32097 S/A
 Depth: 2 IN
 Rows per Plot: 4 Planting Method: PLANTD planted
 Row Spacing: 30 IN Planting Equipment: FPP finger pickup planter
 Seed Bed: MEDIUM medium
 Soil Moisture: DRY dry
 Soil Temperature: 52 F
 Emergence Date: May-16-2022

Pest Description

Pest 1 Type: W Code: AMBTR Ambrosia trifida Stage Scale: BBCH
 Common Name: Giant ragweed
 Attributes: Natural population
 Pest 2 Type: W Code: IPOHE Ipomoea hederacea Stage Scale: BBCH
 Common Name: ivy-leaf morning glory
 Attributes: Natural population
 Pest 3 Type: W Code: IPOSS Ipomoea sp. Stage Scale: BBCH
 Common Name: Morning glory
 Attributes: Natural population
 Pest 4 Type: W Code: ABUTH Abutilon theophrasti Stage Scale: BBCH
 Common Name: velvetleaf
 Attributes: Natural population
 Pest 5 Type: W Code: SETFA Setaria faberi Entry Date: May-25-2022
 Common Name: Giant foxtail Stage Scale: BBCH
 Pest 6 Type: W Code: CHEAL Chenopodium album Entry Date: May-25-2022
 Common Name: common lambsquarters Stage Scale: BBCH
 Pest 7 Type: W Code: AMARE Amaranthus retroflexus Entry Date: May-25-2022
 Common Name: Redroot pigweed Stage Scale: BBCH

Site and Design

Treated Plot Width: 6.67 FT Site Type: FIELD field
 Treated Plot Length: 30 FT Experimental Unit: 4 ROW row
 Treated Plot Area: 200.1 FT2 Tillage Type: CONTIL conventional-till
 Replications: 4 Treatments: 12 Plots: 48 Study Design: RACOB. Randomized Complete Block (RCB)
 Untreated Arrangement: INCLUDED single control randomized in each block

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Previous
 No. Crop Year
 1. SOYBEAN2021

Field Prep./Maintenance:

Maintain fertility program for optimum corn growth. Conventional tillage is required for this trial.

DO NOT use Counter 20G insecticide at-planting in this trial.

Soil Description

Description Name: G-6
 % Sand: 32 % OM: 2.2 Texture: SICL silty clay loam
 % Silt: 53 Soil Name: Kokomo
 % Clay: 15 Fert. Level: G good
 pH: 5.9 CEC: 14
 g o o d

Application Description

Application Date	May-24-2022
Appl. Start Time	1:00 AM
Appl. Stop Time	1:30 AM
Application Method	SPRAY
Application Timing	EAPOWE
Application Placement	BROFOL
Applied By	Loux
Appl. Entry Date	May-25-2022
Air Temperature Start, Stop	68, 68 F
% Relative Humidity Start, Stop	42, 42
Wind Velocity+Dir. Start	10 MPH, NE
Wind Velocity+Dir. Stop	10 MPH, NE
Wind Velocity+Dir. Max	10 MPH, NE
Wet Leaves (Y/N)	Y, yes
Soil Temperature	69 F
Soil Moisture	DRY
Soil Surface Condition	MEDTRA
% Cloud Cover	25
Next Moisture Occurred On	May-25-2022
Time to Next Moisture	1.0 DAY
Moisture 6 Hours after Appl.	0 IN
Moisture 1 Week after Appl.	1.23 IN

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Protocol Application Directions:

Water Volume and Source: Apply at 15 GPA. If water is known to have mineral content, report water hardness.

Application Timing: Apply EAPOWE, applicaton code A, treatments to corn at growth stage of V1-V2, before emerged weeds exceed 3" height.

Please record following information in **SITE DESCRIPTION** sections:

Crop/Weed Information: Crop stage & height; weed stage, weed height & weed density for each species at application.

Application details: Date, time, sprayer type, GPA, PSI, nozzle type and orifice size. Use a spray nozzle which produces medium to coarse size droplets (approximate VMD range of 250 to 400 microns). **Do not use TeeJet AI, AIXR, TTI spray tips or any tips that produce very coarse (VC), extremely coarse (XC), or ultra coarse (UC) spray droplets.**

Environmental Conditions: Record air temperature, wind speed & direction, humidity & percent cloud cover at application.

Crop Stage At Each Application

Crop 1 Code, BBCH Scale	ZEAMX ^A , BCOR
Days after Emergence	8
Stage Majority, Percent	13, 100
Height Average	7 IN
Height Minimum, Maximum	5.5, 8.5

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Pest Stage At Each Application

Pest 1 Code, Type, Scale	AMBTR, W, BBCH
Stage Majority, Percent	14, 60
Stage Minimum, Percent	10, 20
Stage Maximum, Percent	16, 20
Height Average	2.5 IN
Height Minimum, Maximum	0.5, 3
Density Average	5 PLA/M2
Density Minimum, Maximum	2, 8
Pest 2 Code, Type, Scale	IPOHE, W, BBCH
Stage Majority, Percent	10, 100
Height Average	1 IN
Height Minimum, Maximum	0.5, 1
Density Average	2 PLA/M2
Density Minimum, Maximum	0, 3
Pest 3 Code, Type, Scale	IPOSS, W, BBCH
Pest 4 Code, Type, Scale	ABUTH, W, BBCH
Stage Majority, Percent	12, 80
Stage Minimum, Percent	11, 10
Stage Maximum, Percent	12, 10
Height Average	1 IN
Height Minimum, Maximum	0.5, 1
Density Average	3 PLA/M2
Density Minimum, Maximum	1, 6
Pest 5 Code, Type, Scale	SETFA, W, BBCH
Stage Majority, Percent	12, 80
Stage Minimum, Percent	12, 10
Stage Maximum, Percent	13, 10
Height Average	2 IN
Height Minimum, Maximum	0.5, 3
Density Average	176 PLA/M2
Density Minimum, Maximum	124, 212
Pest 6 Code, Type, Scale	CHEAL, W, BBCH
Stage Majority, Percent	14, 80
Stage Minimum, Percent	12, 10
Stage Maximum, Percent	14, 10
Height Average	0.5 IN
Height Minimum, Maximum	0.75, 0.5
Density Average	12 PLA/M2
Density Minimum, Maximum	4, 22
Pest 7 Code, Type, Scale	AMARE, W, BBCH
Stage Majority, Percent	12, 80
Stage Minimum, Percent	10, 10
Stage Maximum, Percent	12, 10
Height Average	0.5 IN
Height Minimum, Maximum	0.75, 1
Density Average	2 PLA/M2
Density Minimum, Maximum	0, 4

Application Equipment

Appl. Equipment	10' AIXR
Equipment Type	BACCAI
Operation Pressure	44 PSI
Nozzle Model	110015
Nozzle Type	AI XR
Nozzle TradeName	TeeJet
Nozzle Tip Size, Color	015, green
Nozzle Spacing	18 IN
Boom Length	10 FT
Boom Height	20 IN
Ground Speed	3 MPH
Carrier	WATER
Water Hardness (ppm CaCO3)	250
Application Amount	15 GAL/AC
Mix Overage	25 mL
Mix Size	2 L
Spray pH	7.8
Propellant	COMCO2
Tank Mix (Y/N)	Y, yes

Protocol Equipment Comment:

Small plot equipment.

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Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description	1*	2*	3*	4*	5*
1	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	4bc	0-	100-
1	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
1	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
1	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
2	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	1-	5ab	0-	100-
2	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
2	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
2	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
2	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
3	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	2-	9a	0-	100-
3	Atrazine	2 lb ai/a	A	V1-V2	corn, 3" weed max					
3	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
3	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
3	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
4	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	3bcd	1-	100-
4	Hornet	0.043 lb ai/a	A	V1-V2	corn, 3" weed max					
4	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
4	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
4	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
4	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
5	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	1-	8a	0-	100-
5	Hornet	0.086 lb ai/a	A	V1-V2	corn, 3" weed max					
5	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
5	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
5	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
5	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
6	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	1-	5ab	0-	100-
6	Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max					
6	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
6	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
6	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
6	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.
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Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description	1*	2*	3*	4*	5*
7	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	3bcd	0-	100-
7	Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max					
7	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
7	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
7	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
8	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	1-	4bc	0-	100-
8	Hornet	0.171 lb ai/a	A	V1-V2	corn, 3" weed max					
8	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
8	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
8	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
9	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	6ab	0-	100-
9	DiFlexx	0.25 lb ae/a	A	V1-V2	corn, 3" weed max					
9	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
9	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
9	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
10	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	6ab	0-	100-
10	DiFlexx	0.5 lb ae/a	A	V1-V2	corn, 3" weed max					
10	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
10	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
10	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
11	RESICORE	1.23 lb ai/a	A	V1-V2	corn, 3" weed max	0-	1-	1cd	0-	100-
11	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
11	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
11	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					

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Trt	Treatment	Rate	Appl	Appl	1*	2*	3*	4*	5*	
No.	Name	Rate	Unit	Code	Description					
	12 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max	0-	0-	0d	0-	95-
	12 NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
	12 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
LSD P=.05							1.1	2.6	0.4	4.0
Standard Deviation						0.0	0.8	1.8	0.3	2.8
CV						0.0	201.01	40.3	692.82	2.82
Grand Mean						0.0	0.4	4.4	0.0	99.5
Levene's F^						.	1.036	0.933	0.758	1.132
Levene's Prob(F)						.	0.437	0.521	0.678	0.367
Rank X2						.	.	.	.	.
P(Rank X2)						.	.	.	.	.
Skewness^						.	0.8187*	-0.0048	3.5949*	-3.4959*
Kurtosis^						.	1.2862	1.0205	22.9943*	22.6952*
Replicate F						0.000	0.147	0.337	1.000	1.000
Replicate Prob(F)						1.0000	0.9311	0.7989	0.4051	0.4051
Treatment F						0.000	1.640	8.673	1.000	1.283
Treatment Prob(F)						1.0000	0.1330	0.0001	0.4671	0.2770

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Pest Type	W, Weed	W, Weed	W, Weed
Pest Code	ECHCG	AMBTR	CHEAL
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>
Pest Name	common barnyard>	Giant ragweed	common lambsqua>
Crop Type, Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	Jun-2-2022	Jun-2-2022	Jun-2-2022
SE Group No.	15	16	17
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>
Part Rated	PLANT, P	PLANT, P	PLANT, P
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100
Sample Size	2 ROW	2 ROW	2 ROW
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Data Entry Date	Jun-8-2022	Jun-8-2022	Jun-8-2022
Days After First/Last Applic.	9, 9	9, 9	9, 9
Trt-Eval Interval	9 DA-A	9 DA-A	9 DA-A
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1
Days After Emergence	17 DE-1	17 DE-1	17 DE-1
Number of Decimals	0	0	0

Trt	Treatment	Rate	Unit	Appl	Appl	6*	7*	8*
No.	Name			Code	Description			
1	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-	98 a	100-
1	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
1	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
1	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
2	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-	100 a	100-
2	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max			
2	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
2	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
2	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
3	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-	100 a	100-
3	Atrazine	2 lb ai/a	A	V1-V2	corn, 3" weed max			
3	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
3	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
3	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
4	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-	100 a	100-
4	Hornet	0.043 lb ai/a	A	V1-V2	corn, 3" weed max			
4	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max			
4	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
4	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
4	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
5	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-	100 a	100-
5	Hornet	0.086 lb ai/a	A	V1-V2	corn, 3" weed max			
5	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max			
5	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
5	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
5	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
6	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-	100 a	100-
6	Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max			
6	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max			
6	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
6	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
6	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			

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Pest Type	W, Weed	W, Weed	W, Weed			
Pest Code	ECHCG	AMBTR	CHEAL			
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>			
Pest Name	common barnyard>	Giant ragweed	common lambsqua>			
Crop Type, Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date	Jun-2-2022	Jun-2-2022	Jun-2-2022			
SE Group No.	15	16	17			
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>			
Part Rated	PLANT, P	PLANT, P	PLANT, P			
Rating Type	CONTRO	CONTRO	CONTRO			
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100			
Sample Size	2 ROW	2 ROW	2 ROW			
Collection Basis	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1			
Data Entry Date	Jun-8-2022	Jun-8-2022	Jun-8-2022			
Days After First/Last Applic.	9, 9	9, 9	9, 9			
Trt-Eval Interval	9 DA-A	9 DA-A	9 DA-A			
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1			
Days After Emergence	17 DE-1	17 DE-1	17 DE-1			
Number of Decimals	0	0	0			
Trt Treatment No. Name	Rate	Appl	Appl	6*	7*	8*
Rate Unit	Code	Description	Description			
7 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100-	100a	100-
7 Hornet	0.128 lb ai/a	A	V1-V2 corn, 3" weed max			
7 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
7 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
7 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
8 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100-	100a	100-
8 Hornet	0.171 lb ai/a	A	V1-V2 corn, 3" weed max			
8 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
8 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
8 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
9 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100-	100a	100-
9 DiFlexx	0.25 lb ae/a	A	V1-V2 corn, 3" weed max			
9 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
9 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
9 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
10 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100-	100a	100-
10 DiFlexx	0.5 lb ae/a	A	V1-V2 corn, 3" weed max			
10 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
10 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
10 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
11 RESICORE	1.23 lb ai/a	A	V1-V2 corn, 3" weed max	100-	100a	100-
11 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
11 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
11 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed
Pest Code	ECHCG	AMBTR	CHEAL
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>
Pest Name	common barnyard>	Giant ragweed	common lambsqua>
Crop Type, Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	Jun-2-2022	Jun-2-2022	Jun-2-2022
SE Group No.	15	16	17
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>
Part Rated	PLANT, P	PLANT, P	PLANT, P
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100
Sample Size	2 ROW	2 ROW	2 ROW
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Data Entry Date	Jun-8-2022	Jun-8-2022	Jun-8-2022
Days After First/Last Applic.	9, 9	9, 9	9, 9
Trt-Eval Interval	9 DA-A	9 DA-A	9 DA-A
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1
Days After Emergence	17 DE-1	17 DE-1	17 DE-1
Number of Decimals	0	0	0
Trt Treatment	6*	7*	8*
No. Name			
Rate			
Unit			
Appl			
Code			
Description			
12 Roundup PowerMax	0.75 lb ae/a A	V1-V2 corn, 3" weed max	95-
12 NIS	0.25 % v/v A	V1-V2 corn, 3" weed max	75b
12 Ammonium sulfate	5 % v/v A	V1-V2 corn, 3" weed max	100-
LSD P=.05	4.0	4.3	.
Standard Deviation	2.8	3.0	0.0
CV	2.82	3.06	0.0
Grand Mean	99.5	97.8	100.0
Levene's F^	1.132	0.868	.
Levene's Prob(F)	0.367	0.578	.
Rank X2	.	.	.
P(Rank X2)	.	.	.
Skewness^	-3.4959*	-3.3504*	.
Kurtosis^	22.6952*	20.4757*	.
Replicate F	1.000	0.764	0.000
Replicate Prob(F)	0.4051	0.5226	1.0000
Treatment F	1.283	23.030	0.000
Treatment Prob(F)	0.2770	0.0001	1.0000

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
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 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description	9*	10*	11*	12*	13*
1	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	1 ab	1-	100 a
1	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
1	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
1	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
2	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	1-	2 ab	0-	100 a
2	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
2	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
2	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
2	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
3	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	1-	0-	2 a	0-	100 a
3	Atrazine	2 lb ai/a	A	V1-V2	corn, 3" weed max					
3	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
3	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
3	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
4	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	1-	0-	2 ab	1-	100 a
4	Hornet	0.043 lb ai/a	A	V1-V2	corn, 3" weed max					
4	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
4	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
4	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
4	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
5	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	3-	0-	2 ab	1-	100 a
5	Hornet	0.086 lb ai/a	A	V1-V2	corn, 3" weed max					
5	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
5	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
5	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
5	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
6	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	2 ab	1-	100 a
6	Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max					
6	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
6	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
6	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
6	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.
 ^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Trt	Treatment	Rate	Appl	Appl	9*	10*	11*	12*	13*	
No.	Name	Rate	Unit	Code	Description					
7	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	1-	0-	2ab	1-	100a
7	Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max					
7	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
7	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
7	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
8	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	2ab	2-	100a
8	Hornet	0.171 lb ai/a	A	V1-V2	corn, 3" weed max					
8	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
8	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
8	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
9	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	2a	0-	100a
9	DiFlexx	0.25 lb ae/a	A	V1-V2	corn, 3" weed max					
9	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
9	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
9	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
10	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	1-	0-	2ab	0-	100a
10	DiFlexx	0.5 lb ae/a	A	V1-V2	corn, 3" weed max					
10	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
10	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
10	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
11	RESICORE	1.23 lb ai/a	A	V1-V2	corn, 3" weed max	0-	1-	1b	1-	100a
11	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
11	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
11	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description	9*	10*	11*	12*	13*
12	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max	0-	0-	0c	0-	88b
12	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
12	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
LSD P=.05						2.3	0.7	0.7	1.7	6.2
Standard Deviation						1.6	0.5	0.5	1.2	4.3
CV						270.78	374.97	30.46	187.88	4.37
Grand Mean						0.6	0.1	1.6	0.6	98.9
Levene's F^						1.559	0.916	0.897	0.712	18.364
Levene's Prob(F)						0.154	0.535	0.553	0.719	0.00*
Rank X2						.	.	.	.	.
P(Rank X2)						.	.	.	.	.
Skewness^						1.185*	2.2293*	0.2335	1.0737*	-0.6773
Kurtosis^						1.8581*	6.9227*	0.3214	1.4252*	11.1954*
Replicate F						0.757	0.379	1.928	0.807	1.024
Replicate Prob(F)						0.5262	0.7685	0.1443	0.4996	0.3945
Treatment F						1.081	0.724	6.588	0.844	2.771
Treatment Prob(F)						0.4053	0.7077	0.0001	0.5998	0.0116

Pest Type	Pest Code	Pest Scientific Name	Pest Name	Crop Type, Code	BBCH Scale	Crop Scientific Name	Crop Name	Rating Date	SE Group No.	SE Description	Part Rated	Rating Type	Rating Unit/Min/Max	Sample Size	Collection Basis	Number of Subsamples	Data Entry Date	Days After First/Last Applic.	Trt-Eval Interval	Plant-Eval Interval	Days After Emergence	Number of Decimals
				C, ZEAMX	BCOR	Zea mays	Corn	Jun-7-2022	18		PLANT, C	PHYSTU	% , 0, 100	2 ROW	1 PLOT	1	Jun-8-2022	14, 14	14 DA-A	36 DP-1	22 DE-1	0
W, Weed	SETFA	Setaria faberi	Giant foxtail	C, ZEAMX	BCOR	Zea mays	Corn	Jun-7-2022	19		PLANT, C	PHYCHL	% , 0, 100	2 ROW	1 PLOT	1	Jun-8-2022	14, 14	14 DA-A	36 DP-1	22 DE-1	0
				C, ZEAMX	BCOR	Zea mays	Corn	Jun-7-2022	20		PLANT, C	PHYNEC	% , 0, 100	2 ROW	1 PLOT	1	Jun-8-2022	14, 14	14 DA-A	36 DP-1	22 DE-1	0
				C, ZEAMX	BCOR	Zea mays	Corn	Jun-7-2022	21	WEED CONTROL 14>	PLANT, C	PHYLMA	% , 0, 100	2 ROW	1 PLOT	1	Jun-8-2022	14, 14	14 DA-A	36 DP-1	22 DE-1	0

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
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 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.
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The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed				
Pest Code	ECHCG	AMBTR	CHEAL				
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>				
Pest Name	common barnyard>	Giant ragweed	common lambsqua>				
Crop Type, Code							
BBCH Scale							
Crop Scientific Name							
Crop Name							
Rating Date	Jun-7-2022	Jun-7-2022	Jun-7-2022				
SE Group No.	23	24	25				
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>				
Part Rated	PLANT, P	PLANT, P	PLANT, P				
Rating Type	CONTRO	CONTRO	CONTRO				
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100				
Sample Size	2 ROW	2 ROW	2 ROW				
Collection Basis	1 PLOT	1 PLOT	1 PLOT				
Number of Subsamples	1	1	1				
Data Entry Date	Jun-8-2022	Jun-8-2022	Jun-8-2022				
Days After First/Last Applic.	14, 14	14, 14	14, 14				
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A				
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1				
Days After Emergence	22 DE-1	22 DE-1	22 DE-1				
Number of Decimals	0	0	0				
Trt Treatment No. Name	Rate	Unit	Appl Code	Appl Description	14*	15*	16*
1 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	85 b	100 a
1 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
1 NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
1 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
2 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	95 ab	100 a
2 Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max			
2 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
2 NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
2 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
3 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	98 ab	100 a
3 Atrazine	2 lb ai/a	A	V1-V2	corn, 3" weed max			
3 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
3 NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
3 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
4 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	98 ab	100 a
4 Hornet	0.043 lb ai/a	A	V1-V2	corn, 3" weed max			
4 Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max			
4 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
4 NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
4 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
5 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	100 a	100 a
5 Hornet	0.086 lb ai/a	A	V1-V2	corn, 3" weed max			
5 Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max			
5 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
5 NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
5 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
6 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	100 a	100 a
6 Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max			
6 Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max			
6 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
6 NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
6 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed
Pest Code	ECHCG	AMBTR	CHEAL
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>
Pest Name	common barnyard>	Giant ragweed	common lambsqua>
Crop Type, Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	Jun-7-2022	Jun-7-2022	Jun-7-2022
SE Group No.	23	24	25
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>
Part Rated	PLANT, P	PLANT, P	PLANT, P
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100
Sample Size	2 ROW	2 ROW	2 ROW
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Data Entry Date	Jun-8-2022	Jun-8-2022	Jun-8-2022
Days After First/Last Applic.	14, 14	14, 14	14, 14
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1
Days After Emergence	22 DE-1	22 DE-1	22 DE-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description	14*	15*	16*
7	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	92 ab	100 a
7	Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max			
7	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
7	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
7	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
8	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	100 a	100 a
8	Hornet	0.171 lb ai/a	A	V1-V2	corn, 3" weed max			
8	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
8	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
8	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
9	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	96 ab	100 a
9	DiFlexx	0.25 lb ae/a	A	V1-V2	corn, 3" weed max			
9	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
9	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
9	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
10	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	95 ab	100 a
10	DiFlexx	0.5 lb ae/a	A	V1-V2	corn, 3" weed max			
10	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
10	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
10	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			
11	RESICORE	1.23 lb ai/a	A	V1-V2	corn, 3" weed max	100 a	100 a	100 a
11	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max			
11	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max			
11	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max			

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.
 ^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed
Pest Code	ECHCG	AMBTR	CHEAL
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>
Pest Name	common barnyard>	Giant ragweed	common lambsqua>
Crop Type, Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	Jun-7-2022	Jun-7-2022	Jun-7-2022
SE Group No.	23	24	25
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>
Part Rated	PLANT, P	PLANT, P	PLANT, P
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100
Sample Size	2 ROW	2 ROW	2 ROW
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Data Entry Date	Jun-8-2022	Jun-8-2022	Jun-8-2022
Days After First/Last Applic.	14, 14	14, 14	14, 14
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1
Days After Emergence	22 DE-1	22 DE-1	22 DE-1
Number of Decimals	0	0	0
Trt Treatment	14*	15*	16*
No. Name			
Rate			
Unit			
Appl Code			
Appl Description			
12 Roundup PowerMax	0.75 lb ae/a A	V1-V2 corn, 3" weed max	88 b
12 NIS	0.25 % v/v A	V1-V2 corn, 3" weed max	58 c
12 Ammonium sulfate	5 % v/v A	V1-V2 corn, 3" weed max	78 b
LSD P=.05	6.2	8.6	10.9
Standard Deviation	4.3	6.0	7.6
CV	4.37	6.46	7.74
Grand Mean	98.9	92.9	98.1
Levene's F^	18.364	1.684	61.364
Levene's Prob(F)	0.00*	0.117	0.00*
Rank X2	.	.	.
P(Rank X2)	.	.	.
Skewness^	-0.6773	0.2921	-0.2223
Kurtosis^	11.1954*	1.2159	9.0878*
Replicate F	1.024	0.097	1.000
Replicate Prob(F)	0.3945	0.9614	0.4051
Treatment F	2.771	15.871	2.928
Treatment Prob(F)	0.0116	0.0001	0.0083

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 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description	17*	18*	19*	20*	21*
1	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	0-	0-	96 a
1	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
1	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
1	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
2	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	0-	0-	100 a
2	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
2	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
2	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
2	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
3	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	0-	0-	100 a
3	Atrazine	2 lb ai/a	A	V1-V2	corn, 3" weed max					
3	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
3	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
3	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
4	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	0-	0-	100 a
4	Hornet	0.043 lb ai/a	A	V1-V2	corn, 3" weed max					
4	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
4	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
4	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
4	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
5	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	0-	0-	100 a
5	Hornet	0.086 lb ai/a	A	V1-V2	corn, 3" weed max					
5	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
5	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
5	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
5	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					
6	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	0-	0-	0-	0-	100 a
6	Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max					
6	Atrazine	1 lb ai/a	A	V1-V2	corn, 3" weed max					
6	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max					
6	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max					
6	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.
 ^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type						W, Weed		
Pest Code						SETFA		
Pest Scientific Name						Setaria faberi		
Pest Name						Giant foxtail		
Crop Type, Code	C, ZEAMX	C, ZEAMX	C, ZEAMX	C, ZEAMX				
BBCH Scale	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Name	Corn	Corn	Corn	Corn				
Rating Date	Jun-21-2022	Jun-21-2022	Jun-21-2022	Jun-21-2022	Jun-21-2022			
SE Group No.	26	27	28	29	30			
SE Description						WEED CONTROL 14>		
Part Rated	PLANT, C	PLANT, C	PLANT, -	PLANT, -	PLANT, P			
Rating Type	PHYSTU	PHYCHL	PHYNEC	PHYLMA	CONTRO			
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100			
Sample Size	2 ROW	2 ROW	2 ROW	2 ROW	2 ROW			
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1			
Data Entry Date	Jun-27-2022	Jun-27-2022	Jun-27-2022	Jun-27-2022	Jun-27-2022			
Days After First/Last Applic.	28, 28	28, 28	28, 28	28, 28	28, 28			
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A			
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	50 DP-1	50 DP-1			
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1	36 DE-1			
Number of Decimals	0	0	0	0	0			
Trt Treatment No. Name	Rate	Appl	Appl					
	Rate Unit	Code	Description	17*	18*	19*	20*	21*
7 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	0-	0-	0-	0-	96 a
7 Hornet	0.128 lb ai/a	A	V1-V2 corn, 3" weed max					
7 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max					
7 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max					
7 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max					
8 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	0-	0-	0-	0-	100 a
8 Hornet	0.171 lb ai/a	A	V1-V2 corn, 3" weed max					
8 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max					
8 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max					
8 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max					
9 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	0-	0-	0-	0-	100 a
9 DiFlexx	0.25 lb ae/a	A	V1-V2 corn, 3" weed max					
9 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max					
9 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max					
9 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max					
10 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	0-	0-	0-	0-	100 a
10 DiFlexx	0.5 lb ae/a	A	V1-V2 corn, 3" weed max					
10 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max					
10 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max					
10 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max					
11 RESICORE	1.23 lb ai/a	A	V1-V2 corn, 3" weed max	0-	0-	0-	0-	98 a
11 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max					
11 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max					
11 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.
 ^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type						W, Weed		
Pest Code						SETFA		
Pest Scientific Name						Setaria faberi		
Pest Name						Giant foxtail		
Crop Type, Code	C, ZEAMX	C, ZEAMX	C, ZEAMX	C, ZEAMX				
BBCH Scale	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Name	Corn	Corn	Corn	Corn				
Rating Date	Jun-21-2022	Jun-21-2022	Jun-21-2022	Jun-21-2022	Jun-21-2022			
SE Group No.	26	27	28	29	30			
SE Description						WEED CONTROL 14>		
Part Rated	PLANT, C	PLANT, C	PLANT, -	PLANT, -	PLANT, P			
Rating Type	PHYSTU	PHYCHL	PHYNEC	PHYLMA	CONTRO			
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100	% , 0, 100			
Sample Size	2 ROW	2 ROW	2 ROW	2 ROW	2 ROW			
Collection Basis	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1			
Data Entry Date	Jun-27-2022	Jun-27-2022	Jun-27-2022	Jun-27-2022	Jun-27-2022			
Days After First/Last Applic.	28, 28	28, 28	28, 28	28, 28	28, 28			
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A			
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	50 DP-1	50 DP-1			
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1	36 DE-1			
Number of Decimals	0	0	0	0	0			
Trt Treatment	17*	18*	19*	20*	21*			
No. Name	Rate	Rate	Rate	Rate	Rate			
	Unit	Unit	Unit	Unit	Unit			
	Appl	Appl	Appl	Appl	Appl			
	Description	Description	Description	Description	Description			
12 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max	0-	0-	0-	0-	60b
12 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max					
12 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max					
LSD P=.05								6.1
Standard Deviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
CV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.43
Grand Mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.9
Levene's F^	2.869
Levene's Prob(F)	0.008*
Rank X2
P(Rank X2)
Skewness^	-0.4648
Kurtosis^	1.8282*
Replicate F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.942
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0474
Treatment F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	28.746
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
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 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed		
Pest Code	ECHCG	AMBTR	CHEAL		
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>		
Pest Name	common barnyard>	Giant ragweed	common lambsqua>		
Crop Type, Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jun-21-2022	Jun-21-2022	Jun-21-2022		
SE Group No.	31	32	33		
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>		
Part Rated	PLANT, P	PLANT, P	PLANT, P		
Rating Type	CONTRO	CONTRO	CONTRO		
Rating Unit/Min/Max	% , 0, 100	% , 0, 100	% , 0, 100		
Sample Size	2 ROW	2 ROW	2 ROW		
Collection Basis	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1		
Data Entry Date	Jun-27-2022	Jun-27-2022	Jun-27-2022		
Days After First/Last Applic.	28, 28	28, 28	28, 28		
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A		
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1		
Days After Emergence	36 DE-1	36 DE-1	36 DE-1		
Number of Decimals	0	0	0		
Trt Treatment	22*	23*	24*		
No. Name	Rate	Unit	Appl	Appl	Description
1 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3"	weed max
1 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3"	weed max
1 NIS	0.25 % v/v	A	V1-V2	corn, 3"	weed max
1 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3"	weed max
2 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3"	weed max
2 Atrazine	1 lb ai/a	A	V1-V2	corn, 3"	weed max
2 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3"	weed max
2 NIS	0.25 % v/v	A	V1-V2	corn, 3"	weed max
2 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3"	weed max
3 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3"	weed max
3 Atrazine	2 lb ai/a	A	V1-V2	corn, 3"	weed max
3 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3"	weed max
3 NIS	0.25 % v/v	A	V1-V2	corn, 3"	weed max
3 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3"	weed max
4 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3"	weed max
4 Hornet	0.043 lb ai/a	A	V1-V2	corn, 3"	weed max
4 Atrazine	1 lb ai/a	A	V1-V2	corn, 3"	weed max
4 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3"	weed max
4 NIS	0.25 % v/v	A	V1-V2	corn, 3"	weed max
4 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3"	weed max
5 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3"	weed max
5 Hornet	0.086 lb ai/a	A	V1-V2	corn, 3"	weed max
5 Atrazine	1 lb ai/a	A	V1-V2	corn, 3"	weed max
5 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3"	weed max
5 NIS	0.25 % v/v	A	V1-V2	corn, 3"	weed max
5 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3"	weed max
6 Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3"	weed max
6 Hornet	0.128 lb ai/a	A	V1-V2	corn, 3"	weed max
6 Atrazine	1 lb ai/a	A	V1-V2	corn, 3"	weed max
6 Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3"	weed max
6 NIS	0.25 % v/v	A	V1-V2	corn, 3"	weed max
6 Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3"	weed max

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed			
Pest Code	ECHCG	AMBTR	CHEAL			
Pest Scientific Name	Echinochloa cru>	Ambrosia trifida	Chenopodium alb>			
Pest Name	common barnyard>	Giant ragweed	common lambsqua>			
Crop Type, Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date	Jun-21-2022	Jun-21-2022	Jun-21-2022			
SE Group No.	31	32	33			
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>			
Part Rated	PLANT, P	PLANT, P	PLANT, P			
Rating Type	CONTRO	CONTRO	CONTRO			
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100			
Sample Size	2 ROW	2 ROW	2 ROW			
Collection Basis	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1			
Data Entry Date	Jun-27-2022	Jun-27-2022	Jun-27-2022			
Days After First/Last Applic.	28, 28	28, 28	28, 28			
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A			
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1			
Days After Emergence	36 DE-1	36 DE-1	36 DE-1			
Number of Decimals	0	0	0			
Trt Treatment	Rate	Appl	Appl	22*	23*	24*
No. Name	Rate Unit	Code	Description			
7 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	96 a	86 a	100 a
7 Hornet	0.128 lb ai/a	A	V1-V2 corn, 3" weed max			
7 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
7 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
7 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
8 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100 a	92 a	100 a
8 Hornet	0.171 lb ai/a	A	V1-V2 corn, 3" weed max			
8 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
8 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
8 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
9 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100 a	83 a	100 a
9 DiFlexx	0.25 lb ae/a	A	V1-V2 corn, 3" weed max			
9 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
9 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
9 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
10 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100 a	79 a	100 a
10 DiFlexx	0.5 lb ae/a	A	V1-V2 corn, 3" weed max			
10 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
10 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
10 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
11 RESICORE	1.23 lb ai/a	A	V1-V2 corn, 3" weed max	98 a	89 a	100 a
11 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
11 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
11 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type		W, Weed	W, Weed	W, Weed
Pest Code		ECHCG	AMBTR	CHEAL
Pest Scientific Name		Echinochloa cru>	Ambrosia trifida	Chenopodium alb>
Pest Name		common barnyard>	Giant ragweed	common lambsqua>
Crop Type, Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date		Jun-21-2022	Jun-21-2022	Jun-21-2022
SE Group No.		31	32	33
SE Description		WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>
Part Rated		PLANT, P	PLANT, P	PLANT, P
Rating Type		CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max		%, 0, 100	%, 0, 100	%, 0, 100
Sample Size		2 ROW	2 ROW	2 ROW
Collection Basis		1 PLOT	1 PLOT	1 PLOT
Number of Subsamples		1	1	1
Data Entry Date		Jun-27-2022	Jun-27-2022	Jun-27-2022
Days After First/Last Applic.		28, 28	28, 28	28, 28
Trt-Eval Interval		28 DA-A	28 DA-A	28 DA-A
Plant-Eval Interval		50 DP-1	50 DP-1	50 DP-1
Days After Emergence		36 DE-1	36 DE-1	36 DE-1
Number of Decimals		0	0	0
Trt Treatment		22*	23*	24*
No. Name	Rate Unit	Appl Code	Appl Description	
12 Roundup PowerMax	0.75 lb ae/a A	V1-V2	corn, 3" weed max	60 b
12 NIS	0.25 % v/v A	V1-V2	corn, 3" weed max	43 b
12 Ammonium sulfate	5 % v/v A	V1-V2	corn, 3" weed max	75 b
LSD P=.05		6.1	10.6	7.2
Standard Deviation		4.2	7.3	5.0
CV		4.42	9.05	5.11
Grand Mean		95.9	81.1	97.9
Levene's F^		3.085	1.116	1.515
Levene's Prob(F)		0.005*	0.378	0.169
Rank X2		.	.	.
P(Rank X2)		.	.	.
Skewness^		-0.4459	-0.0864	2.7673*
Kurtosis^		1.8554*	-0.3857	21.3311*
Replicate F		2.900	3.518	1.000
Replicate Prob(F)		0.0495	0.0257	0.4051
Treatment F		28.917	12.671	8.333
Treatment Prob(F)		0.0001	0.0001	0.0001

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 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed
Pest Code	SETFA	ECHCG	AMBTR
Pest Scientific Name	Setaria faberi	Echinochloa cru>	Ambrosia trifida
Pest Name	Giant foxtail	common barnyard>	Giant ragweed
Crop Type, Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	Jul-13-2022	Jul-13-2022	Jul-13-2022
SE Group No.	34	35	36
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>
Part Rated	PLANT, P	PLANT, P	PLANT, P
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100
Sample Size	2 ROW	2 ROW	2 ROW
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Data Entry Date	Jul-14-2022	Jul-14-2022	Jul-14-2022
Days After First/Last Applic.	50, 50	50, 50	50, 50
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A
Plant-Eval Interval	72 DP-1	72 DP-1	72 DP-1
Days After Emergence	58 DE-1	58 DE-1	58 DE-1
Number of Decimals	0	0	0
Trt Treatment	25*	26*	27*
No. Name	Rate Unit	Appl Code	Appl Description
1 Impact Core	1.68 lb ai/a A	V1-V2	corn, 3" weed max
1 Roundup PowerMax	0.75 lb ae/a A	V1-V2	corn, 3" weed max
1 NIS	0.25 % v/v A	V1-V2	corn, 3" weed max
1 Ammonium sulfate	5 % v/v A	V1-V2	corn, 3" weed max
2 Impact Core	1.68 lb ai/a A	V1-V2	corn, 3" weed max
2 Atrazine	1 lb ai/a A	V1-V2	corn, 3" weed max
2 Roundup PowerMax	0.75 lb ae/a A	V1-V2	corn, 3" weed max
2 NIS	0.25 % v/v A	V1-V2	corn, 3" weed max
2 Ammonium sulfate	5 % v/v A	V1-V2	corn, 3" weed max
3 Impact Core	1.68 lb ai/a A	V1-V2	corn, 3" weed max
3 Atrazine	2 lb ai/a A	V1-V2	corn, 3" weed max
3 Roundup PowerMax	0.75 lb ae/a A	V1-V2	corn, 3" weed max
3 NIS	0.25 % v/v A	V1-V2	corn, 3" weed max
3 Ammonium sulfate	5 % v/v A	V1-V2	corn, 3" weed max
4 Impact Core	1.68 lb ai/a A	V1-V2	corn, 3" weed max
4 Hornet	0.043 lb ai/a A	V1-V2	corn, 3" weed max
4 Atrazine	1 lb ai/a A	V1-V2	corn, 3" weed max
4 Roundup PowerMax	0.75 lb ae/a A	V1-V2	corn, 3" weed max
4 NIS	0.25 % v/v A	V1-V2	corn, 3" weed max
4 Ammonium sulfate	5 % v/v A	V1-V2	corn, 3" weed max
5 Impact Core	1.68 lb ai/a A	V1-V2	corn, 3" weed max
5 Hornet	0.086 lb ai/a A	V1-V2	corn, 3" weed max
5 Atrazine	1 lb ai/a A	V1-V2	corn, 3" weed max
5 Roundup PowerMax	0.75 lb ae/a A	V1-V2	corn, 3" weed max
5 NIS	0.25 % v/v A	V1-V2	corn, 3" weed max
5 Ammonium sulfate	5 % v/v A	V1-V2	corn, 3" weed max
6 Impact Core	1.68 lb ai/a A	V1-V2	corn, 3" weed max
6 Hornet	0.128 lb ai/a A	V1-V2	corn, 3" weed max
6 Atrazine	1 lb ai/a A	V1-V2	corn, 3" weed max
6 Roundup PowerMax	0.75 lb ae/a A	V1-V2	corn, 3" weed max
6 NIS	0.25 % v/v A	V1-V2	corn, 3" weed max
6 Ammonium sulfate	5 % v/v A	V1-V2	corn, 3" weed max

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

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^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed			
Pest Code	SETFA	ECHCG	AMBTR			
Pest Scientific Name	Setaria faberi	Echinochloa cru>	Ambrosia trifida			
Pest Name	Giant foxtail	common barnyard>	Giant ragweed			
Crop Type, Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date	Jul-13-2022	Jul-13-2022	Jul-13-2022			
SE Group No.	34	35	36			
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>			
Part Rated	PLANT, P	PLANT, P	PLANT, P			
Rating Type	CONTRO	CONTRO	CONTRO			
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100			
Sample Size	2 ROW	2 ROW	2 ROW			
Collection Basis	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1			
Data Entry Date	Jul-14-2022	Jul-14-2022	Jul-14-2022			
Days After First/Last Applic.	50, 50	50, 50	50, 50			
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A			
Plant-Eval Interval	72 DP-1	72 DP-1	72 DP-1			
Days After Emergence	58 DE-1	58 DE-1	58 DE-1			
Number of Decimals	0	0	0			
Trt Treatment No. Name	Rate	Appl Code	Appl Description	25*	26*	27*
7 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	91 a	91 a	78 a
7 Hornet	0.128 lb ai/a	A	V1-V2 corn, 3" weed max			
7 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
7 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
7 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
8 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	98 a	97 a	83 a
8 Hornet	0.171 lb ai/a	A	V1-V2 corn, 3" weed max			
8 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
8 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
8 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
9 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100 a	100 a	78 a
9 DiFlexx	0.25 lb ae/a	A	V1-V2 corn, 3" weed max			
9 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
9 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
9 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
10 Impact Core	1.68 lb ai/a	A	V1-V2 corn, 3" weed max	100 a	100 a	70 a
10 DiFlexx	0.5 lb ae/a	A	V1-V2 corn, 3" weed max			
10 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
10 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
10 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			
11 RESICORE	1.23 lb ai/a	A	V1-V2 corn, 3" weed max	90 a	90 a	83 a
11 Roundup PowerMax	0.75 lb ae/a	A	V1-V2 corn, 3" weed max			
11 NIS	0.25 % v/v	A	V1-V2 corn, 3" weed max			
11 Ammonium sulfate	5 % v/v	A	V1-V2 corn, 3" weed max			

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

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^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed	W, Weed	W, Weed
Pest Code	SETFA	ECHCG	AMBTR
Pest Scientific Name	Setaria faberi	Echinochloa cru>	Ambrosia trifida
Pest Name	Giant foxtail	common barnyard>	Giant ragweed
Crop Type, Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	Jul-13-2022	Jul-13-2022	Jul-13-2022
SE Group No.	34	35	36
SE Description	WEED CONTROL 14>	WEED CONTROL 14>	WEED CONTROL 14>
Part Rated	PLANT, P	PLANT, P	PLANT, P
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100
Sample Size	2 ROW	2 ROW	2 ROW
Collection Basis	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Data Entry Date	Jul-14-2022	Jul-14-2022	Jul-14-2022
Days After First/Last Applic.	50, 50	50, 50	50, 50
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A
Plant-Eval Interval	72 DP-1	72 DP-1	72 DP-1
Days After Emergence	58 DE-1	58 DE-1	58 DE-1
Number of Decimals	0	0	0
Trt Treatment	25*	26*	27*
No. Name			
Rate			
Unit			
Appl			
Code			
Description			
12 Roundup PowerMax	0.75 lb ae/a A		
12 NIS	0.25 % v/v A		
12 Ammonium sulfate	5 % v/v A		
	V1-V2 corn, 3" weed max		
	V1-V2 corn, 3" weed max		
	V1-V2 corn, 3" weed max		
LSD P=.05	7.7	7.8	12.7
Standard Deviation	5.3	5.4	8.8
CV	6.03	6.15	12.27
Grand Mean	88.6	88.5	72.0
Levene's F^	1.043	0.911	0.657
Levene's Prob(F)	0.431	0.54	0.768
Rank X2	.	.	.
P(Rank X2)	.	.	.
Skewness^	-0.7578*	-0.7244*	0.7556*
Kurtosis^	1.9383*	1.4384*	0.9742
Replicate F	7.636	7.196	2.568
Replicate Prob(F)	0.0005	0.0008	0.0711
Treatment F	110.660	106.448	27.856
Treatment Prob(F)	0.0001	0.0001	0.0001

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 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

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^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type	W, Weed
Pest Code	CHEAL
Pest Scientific Name	Chenopodium alb>
Pest Name	common lambsqua>
Crop Type, Code	
BBCH Scale	
Crop Scientific Name	
Crop Name	
Rating Date	Jul-13-2022
SE Group No.	37
SE Description	WEED CONTROL 14>
Part Rated	PLANT, P
Rating Type	CONTRO
Rating Unit/Min/Max	%, 0, 100
Sample Size	2 ROW
Collection Basis	1 PLOT
Number of Subsamples	1
Data Entry Date	Jul-14-2022
Days After First/Last Applic.	50, 50
Trt-Eval Interval	50 DA-A
Plant-Eval Interval	72 DP-1
Days After Emergence	58 DE-1
Number of Decimals	0

Trt	Treatment	Rate	Unit	Appl	Appl	Code	Description	28*
No.	Name	Rate	Unit					
1	Impact Core	1.68 lb ai/a	A			V1-V2 corn, 3"	weed max	100-
1	Roundup PowerMax	0.75 lb ae/a	A			V1-V2 corn, 3"	weed max	
1	NIS	0.25% v/v	A			V1-V2 corn, 3"	weed max	
1	Ammonium sulfate	5% v/v	A			V1-V2 corn, 3"	weed max	
2	Impact Core	1.68 lb ai/a	A			V1-V2 corn, 3"	weed max	100-
2	Atrazine	1 lb ai/a	A			V1-V2 corn, 3"	weed max	
2	Roundup PowerMax	0.75 lb ae/a	A			V1-V2 corn, 3"	weed max	
2	NIS	0.25% v/v	A			V1-V2 corn, 3"	weed max	
2	Ammonium sulfate	5% v/v	A			V1-V2 corn, 3"	weed max	
3	Impact Core	1.68 lb ai/a	A			V1-V2 corn, 3"	weed max	100-
3	Atrazine	2 lb ai/a	A			V1-V2 corn, 3"	weed max	
3	Roundup PowerMax	0.75 lb ae/a	A			V1-V2 corn, 3"	weed max	
3	NIS	0.25% v/v	A			V1-V2 corn, 3"	weed max	
3	Ammonium sulfate	5% v/v	A			V1-V2 corn, 3"	weed max	
4	Impact Core	1.68 lb ai/a	A			V1-V2 corn, 3"	weed max	100-
4	Hornet	0.043 lb ai/a	A			V1-V2 corn, 3"	weed max	
4	Atrazine	1 lb ai/a	A			V1-V2 corn, 3"	weed max	
4	Roundup PowerMax	0.75 lb ae/a	A			V1-V2 corn, 3"	weed max	
4	NIS	0.25% v/v	A			V1-V2 corn, 3"	weed max	
4	Ammonium sulfate	5% v/v	A			V1-V2 corn, 3"	weed max	
5	Impact Core	1.68 lb ai/a	A			V1-V2 corn, 3"	weed max	100-
5	Hornet	0.086 lb ai/a	A			V1-V2 corn, 3"	weed max	
5	Atrazine	1 lb ai/a	A			V1-V2 corn, 3"	weed max	
5	Roundup PowerMax	0.75 lb ae/a	A			V1-V2 corn, 3"	weed max	
5	NIS	0.25% v/v	A			V1-V2 corn, 3"	weed max	
5	Ammonium sulfate	5% v/v	A			V1-V2 corn, 3"	weed max	
6	Impact Core	1.68 lb ai/a	A			V1-V2 corn, 3"	weed max	100-
6	Hornet	0.128 lb ai/a	A			V1-V2 corn, 3"	weed max	
6	Atrazine	1 lb ai/a	A			V1-V2 corn, 3"	weed max	
6	Roundup PowerMax	0.75 lb ae/a	A			V1-V2 corn, 3"	weed max	
6	NIS	0.25% v/v	A			V1-V2 corn, 3"	weed max	
6	Ammonium sulfate	5% v/v	A			V1-V2 corn, 3"	weed max	

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
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* Adjusted means

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Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type W, Weed
 Pest Code CHEAL
 Pest Scientific Name Chenopodium alb>
 Pest Name common lambsqua>
 Crop Type, Code
 BBCH Scale
 Crop Scientific Name
 Crop Name
 Rating Date Jul-13-2022
 SE Group No. 37
 SE Description WEED CONTROL 14>
 Part Rated PLANT, P
 Rating Type CONTRO
 Rating Unit/Min/Max %, 0, 100
 Sample Size 2 ROW
 Collection Basis 1 PLOT
 Number of Subsamples 1
 Data Entry Date Jul-14-2022
 Days After First/Last Applic. 50, 50
 Trt-Eval Interval 50 DA-A
 Plant-Eval Interval 72 DP-1
 Days After Emergence 58 DE-1
 Number of Decimals 0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Description	28*
7	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-
7	Hornet	0.128 lb ai/a	A	V1-V2	corn, 3" weed max	
7	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max	
7	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max	
7	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max	
8	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-
8	Hornet	0.171 lb ai/a	A	V1-V2	corn, 3" weed max	
8	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max	
8	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max	
8	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max	
9	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-
9	DiFlexx	0.25 lb ae/a	A	V1-V2	corn, 3" weed max	
9	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max	
9	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max	
9	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max	
10	Impact Core	1.68 lb ai/a	A	V1-V2	corn, 3" weed max	100-
10	DiFlexx	0.5 lb ae/a	A	V1-V2	corn, 3" weed max	
10	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max	
10	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max	
10	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max	
11	RESICORE	1.23 lb ai/a	A	V1-V2	corn, 3" weed max	100-
11	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max	
11	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max	
11	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max	

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Due to missing data, the effective replicates used for mean comparisons are: col. 12=3.9

* Adjusted means

Could not calculate LSD (% mean diff) for columns 1,8,17,18,19,20,28 because error mean square = 0.

^Calculated from residual.

The Ohio State University

Evaluate tank-mixes of Impact CORE with atrazine, DiFlexx, Hornet or clopyralid for early post residual control of giant ragweed, sunflower, morningglory and velvetleaf

Trial ID: 22IMPACTCORE Cooperator Trial ID:
 Protocol ID: 22D12H025 Location: Western Branch G-6 Trial Year: 2022
 Project ID: 025 Project ID 2: Project ID 3:
 Study Director: Joe Bruce Sponsor Contact:
 Investigator (Creator): Dr. Mark M. Loux

Pest Type W, Weed
 Pest Code CHEAL
 Pest Scientific Name Chenopodium alb>
 Pest Name common lambsqua>
 Crop Type, Code
 BBCH Scale
 Crop Scientific Name
 Crop Name
 Rating Date Jul-13-2022
 SE Group No. 37
 SE Description WEED CONTROL 14>
 Part Rated PLANT, P
 Rating Type CONTRO
 Rating Unit/Min/Max %, 0, 100
 Sample Size 2 ROW
 Collection Basis 1 PLOT
 Number of Subsamples 1
 Data Entry Date Jul-14-2022
 Days After First/Last Applic. 50, 50
 Trt-Eval Interval 50 DA-A
 Plant-Eval Interval 72 DP-1
 Days After Emergence 58 DE-1
 Number of Decimals 0

Trt	Treatment	Rate	Unit	Appl	Appl	
No.	Name	Rate	Unit	Code	Description	
12	Roundup PowerMax	0.75 lb ae/a	A	V1-V2	corn, 3" weed max	0-
12	NIS	0.25 % v/v	A	V1-V2	corn, 3" weed max	
12	Ammonium sulfate	5 % v/v	A	V1-V2	corn, 3" weed max	

LSD P=.05 .
 Standard Deviation 0.0
 CV 0.0
 Grand Mean 91.7
 Levene's F^ .
 Levene's Prob(F) .
 Rank X2 .
 P(Rank X2) .
 Skewness^ .
 Kurtosis^ .
 Replicate F 0.000
 Replicate Prob(F) 1.0000
 Treatment F 0.000
 Treatment Prob(F) 1.0000

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).
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Project ID: 025 Project ID 2: Project ID 3:
Study Director: Joe Bruce Sponsor Contact:
Investigator (Creator): Dr. Mark M. Loux

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
ECHCG, Echinochloa crus-galli, common barnyardgrass = US
AMBTR, Ambrosia trifida, Giant ragweed = US
CHEAL, Chenopodium album, common lambsquarters = US

Crop Type, Code

C = EPPPO species (Bayer) codes
ZEAMX, BCOR, Zea mays, Corn = US

Part Rated

PLANT = plant
C = Crop is Part Rated
P = Pest is Part Rated

Rating Type

PHYSTU = phytotoxicity - stunting
PHYCHL = phytotoxicity - chlorosis
PHYNEC = phytotoxicity - necrosis /burn
PHYLMA = phytotoxicity - leaf malformation
CONTRO = control / burndown or knockdown

Rating Unit/Min/Max

%, 0, 100 = percent

ROW = row

PLOT = total plot

Plant-Eval Interval

31 DP-1 = 1 ZEAMX May-2-2022
36 DP-1 = 1 ZEAMX May-2-2022
50 DP-1 = 1 ZEAMX May-2-2022
72 DP-1 = 1 ZEAMX May-2-2022