

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60

Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu

City State Zip Country: Belleville IL 62221 USA

Trial Status: FINAL Initiation Date: 06-30-09

Objectives: Evaluate the efficacy of Vida and Yukon for weed control
in early postemergence applications in corn.

Crop 1: ZEAMD	Dent corn	Variety: DKC 61-73	Description: RR2/YGCB
Planting Method:	SEEDED	Planting Date:	06-30-09
Rate, Unit:	28000 S/A	Depth, Unit:	1.5 IN
Row Spacing, Unit:	30 IN		

Pest 1 Type: W	Code: CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 2 Type: W	Code: AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 3 Type: W	Code: IPOSS		morningglory, species
Pest 4 Type: W	Code: ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit:	10 FT	Site Type:	FIELD
Plot Length, Unit:	24 FT	Tillage Type:	REDUCED-TILL
Replications:	4	Study Design:	Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM:	2.1	Texture:	SILT LOAM
pH:	5.6	Soil Name:	PIERRON
CEC:	12	Fert. Level:	P1 80 LB/A, K 435 LB/A

Application Description

A
Application Date: 07-20-09
Time of Day: 13:00
Application Method: Spray
Application Timing: 3-5"W
Application Placement: BROFOL
Applied By: DKP
Air Temperature, Unit: 78 F
% Relative Humidity: 80
Wind Velocity, Unit: 3 MPH
Wind Direction: E
Dew Presence (Y/N): N
Soil Moisture: NORMAL
% Cloud Cover: 10

07-20-09
Crop stage at application: V5
Height Min, Max (inch): 8 10

Pest Stage At Each Application

Application Date: 07-20-09
Weed Code: CYPES
Stage Majority (leaves): 4
Stage Min, Max: 2 5
Height Majority: 5 IN
Height Min, Max: 3 7
Density, Unit: 0.01 FT2
Weed Code: AMATA
Stage Majority (leaves): 3
Stage Min, Max: 2 5
Height Majority: 2 IN
Height Min, Max: 1 3
Density, Unit: 12 FT2
Weed Code: IPOSS
Stage Majority (leaves): 3
Stage Min, Max: 1 5
Height Majority: 3.5 IN
Height Min, Max: 2 5
Density, Unit: 1 FT2
Weed Code: ABUTH
Stage Majority (leaves): 2
Stage Min, Max: COTY 3
Height Majority: 3 IN
Height Min, Max: 0.5 4
Density, Unit: 0.2 FT2

Application Equipment

Appl. Equipment: CO2 sprayer
Operating Pressure: 30 PSI
Nozzle Type: Flat fan
Nozzle Size: XR 8002
Boom Length, Unit: 7.5 FT
Spray Volume, Unit: 15 GPA

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Pest Code
Crop Code
Rating Date
Rating Data Type
Rating Unit
Rating Timing
Trt-Eval Interval

ZEAMD 01-06-10 Moisture Percent	ZEAMD 01-06-10 Yield bu/A	ZEAMD 07-25-09 Injury Percent	ZEAMD 08-03-09 Injury Percent	ZEAMD 08-17-09 Injury Percent	ZEAMD 09-18-09 Injury Percent
170 DA-A	170 DA-A	5 DA-A	14 DA-A	28 DA-A	60 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	NONTREATED									22.8 a	73 b	0 d	0 c	0 a	0 a
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A	23.2 a	136 a	9 b	3 b	0 a	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A	24.1 a	120 a	5 c	2 bc	0 a	0 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A	22.8 a	131 a	6 c	1 bc	0 a	0 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A	23.5 a	123 a	5 c	1 bc	0 a	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	23.5 a	128 a	0 d	0 c	0 a	0 a
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	22.7 a	121 a	30 a	11 a	0 a	0 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
LSD (P=.05)										2.59	24.1	2.7	2.3	0.0	0.0
Replicate F										0.676	1.404	1.828	1.023	0.000	0.000
Replicate Prob(F)										0.5778	0.2741	0.1781	0.4059	1.0000	1.0000
Treatment F										0.357	6.692	122.396	25.866	0.000	0.000
Treatment Prob(F)										0.8966	0.0007	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60

Location: Belleville Res. Center

Pest Code	CYPES	CYPES	CYPES	CYPES
Crop Code				
Rating Date	07-25-09	08-03-09	08-17-09	09-18-09
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval	5 DA-A	14 DA-A	28 DA-A	60 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NONTREATED									0 c	0 e	0 c	0 c
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A		92 ab	93 ab	95 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A		93 a	93 ab	96 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A		88 d	91 ab	94 ab
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A		90 bc	90 b	91 b
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	21 b	89 cd	90 ab	91 b
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	38 a	94 a	94 a	94 ab
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
LSD (P=.05)										4.3	2.4	3.7	3.6
Replicate F										0.333	2.761	3.858	6.075
Replicate Prob(F)										0.8022	0.0721	0.0271	0.0048
Treatment F										226.333	1822.859	772.544	831.020
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60

Location: Belleville Res. Center

Pest Code	AMATA	AMATA	AMATA	AMATA
Crop Code				
Rating Date	07-25-09	08-03-09	08-17-09	09-18-09
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval	5 DA-A	14 DA-A	28 DA-A	60 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NONTREATED									0 c	0 d	0 c	0 c
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A		99 ab	99 a	98 a
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A		99 a	98 a	99 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A		99 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A		99 a	99 a	98 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	59 b	99 b	99 a	98 a
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	98 a	97 c	96 b	95 b
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
LSD (P=.05)										6.3	0.5	1.4	2.5
Replicate F										0.969	2.400	0.038	0.644
Replicate Prob(F)										0.4665	0.1016	0.9900	0.5967
Treatment F										721.870	55995.244	5800.550	1942.661
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60

Location: Belleville Res. Center

Pest Code	IPOSS	IPOSS	IPOSS	IPOSS
Crop Code				
Rating Date	07-25-09	08-03-09	08-17-09	09-18-09
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval	5 DA-A	14 DA-A	28 DA-A	60 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NONTREATED									0 c	0 c	0 c	0 c
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A		97 a	96 a	95 ab
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A		98 a	96 a	96 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A		97 a	95 ab	95 ab
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A		97 a	96 a	91 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	30 b	93 b	92 b	91 ab
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	95 a	97 a	96 a	86 b
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
LSD (P=.05)										3.1	2.1	3.0	9.5
Replicate F										1.000	0.674	0.565	0.704
Replicate Prob(F)										0.4547	0.5789	0.6451	0.5620
Treatment F										2894.586	2589.186	1230.096	120.405
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60

Location: Belleville Res. Center

Pest Code	ABUTH	ABUTH	ABUTH	ABUTH
Crop Code				
Rating Date	07-25-09	08-03-09	08-17-09	09-18-09
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval	5 DA-A	14 DA-A	28 DA-A	60 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NONTREATED									0 c	0 c	0 d	0 c
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A		99 a	99 ab	98 ab
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A		99 a	99 a	99 ab
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A		99 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A		97 b	98 bc	98 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	69 b	98 ab	99 ab	98 ab
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	94 a	97 b	97 c	98 b
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
LSD (P=.05)										2.5	1.0	1.1	1.1
Replicate F										4.000	0.340	0.945	0.696
Replicate Prob(F)										0.0701	0.7969	0.4397	0.5667
Treatment F										4525.000	13073.039	10968.025	10091.175
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Gowan (VID-09-02-T02; PER-09-08-T02).
2. Ratings: CI/WC at 5, 14 + 28 DAT; Rate only trts 1, 6, + 7 for WC at 5 DAT.
3. Control of target weeds at 60 + 90+ DAT to evaluate residual aspects of control.
Appropriately labeled pictures (trts, DAT) of differences in weed control between programs at later evaluation dates.
4. Target CYPES, IPOSS, AMBSS, AMATA.
Always rate individual species when possible, if not possible always list individual species that were combined.
5. Yield.
6. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
7. Harvested 1-6-10, (2) 30 inch rows by 21 feet.