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Expert in Corn

Trial ID: 03-PPAC-CORN-EXPR   Study Dir.:
Location: PPAC   Investigator: Dr. Bill Johnson

GENERAL TRIAL INFORMATION

Investigator: Dr. Bill Johnson

TRIAL LOCATION

City: Wanatah
State/Prov.: IN
Postal Code: 46390
Country: USA

Unit: xx

COOPERATOR/LANDOWNER

Cooperator: Pinney Purdue Agricultural Center   **Country:** USA
                                                          Phone No: 219-733-2379
Address 1:   11402 South Co. Line Road   **Fax No:**   call first
City: Wanatah
State/Prov: IN
Postal Code: 46390

Conducted Under GLP (Y/N): N   **Conducted Under GEP (Y/N):** N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	AMBTR	RAGWEED, GIANT	AMBROSIA TRIFIDA L.
2.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
3.	PANDI	PANICUM, FALL	PANICUM DICHOTOMIFLORUM (L.) MICHX.
4.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
5.	IPOHE	MORNINGGLORY, IVYLEAF	IPOMOEA HEDERACEA (L.) JACQ.

Crop 1: ZEAMX   CORN, FIELD   **Variety:** DK 60-17
Planting Date: 7/May/2003   **Planting Method:** JD 1650 Finger pickup
Rate: 30800   S/A   **Depth:** 1.5   IN
Row Spacing: 30   IN   **Seed Bed:** tilled
                                    Emergence Date: 19/May/2003

SITE AND DESIGN

Plot Width, Unit: 10   FT   **Plot Length, Unit:** 50   FT   **Reps:** 4
Tillage Type: Conventional   **Study Design:** RANDOMIZED COMPLETE BLOCK

	Previous Crops	Previous Pesticides	Year
1.	Soybeans	Roundup Ultra	2002

SOIL DESCRIPTION

% OM: 2.1   **Texture:**   Coarse
pH: 6.5   **Soil Name:**   Tracey Sand
CEC: 6.9   **Fert. Level:** Bray P - 48; Potassium - 155 (high)

Closest Weather Station: PPAC (Campbell Scientific)   **Distance:** 1000   **Unit:** FT

APPLICATION DESCRIPTION

	A	B
Application Date:	13/May/2003	30/May/2003
Application Method:	SPRAY	SPRAY
Applic. Placement:	BROSOI	BROFOL
Air Temp., Unit:	81 F	72 F
% Relative Humidity:	31	54
Wind Velocity, Unit:	7 MPH	
Soil Temp., Unit:	19 C	16 C
% Cloud Cover:	100	100

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CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	ZEAMX	ZEAMX V2
Stage Scale:		3-4 inch
Height, Unit:		4 IN

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AMBTR	AMBTR 2"
Stage Scale:		2 nodes
Density, Unit:		5 FT2
Weed 2 Code, Stage:	CHEAL	CHEAL 0.5"
Stage Scale:		2 nodes
Density, Unit:		<1 FT2
Weed 3 Code, Stage:	PANDI	PANDI 0.5"
Stage Scale:		2 leaf
Density, Unit:		3 FT2
Weed 4 Code, Stage:	ABUTH	ABUTH 0.75"
Stage Scale:		1 node
Density, Unit:		<1 FT2
Weed 5 Code, Stage:	IPOHE	IPOHE

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Trial ID: 03-PPAC-CORN-EXPR   Study Dir.:
Location: PPAC   Investigator: Dr. Bill Johnson

Weed Code						AMBTR	CHEAL	PANDI
Crop Code				ZEAMX	ZEAMX	ZEAMX			
Part Rated									
Rating Data Type									
Rating Unit									
Rating Date				22/May/2003	30/May/2003	6/Jun/2003	6/Jun/2003	6/Jun/2003	6/Jun/2003
Crop Stage						V2			
Crop Stage Scale						3-5"			
Weed Stage							6-10"	1-5"	1"
Weed Density, Unit							5 FT2	1 FT2	3 FT2
Assessed By									
Trt-Eval Interval				9 DA-A	17 DA-A	24 DA-A	24 DA-A	24 DA-A	24 DA-A
# Subsamples, Dec.				0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	1	2	3	4	5	6
1	Untreated				0 b	0 b	0 a	0 c	0 b	0 c
2	A12453 (Expert)	3.65	lb ai/a	pre	5 b	4 b	0 a	91 ab	100 a	100 a
	AMS	2.5	lb/a	pre						
3	A12453 (Expert)	4.55714	lb ai/a	pre	12 ab	9 b	0 a	94 a	98 a	100 a
	AMS	2.5	lb/a	pre						
4	Field Master	4.25	lb ai/a	pre	17 a	16 a	11 a	97 a	100 a	100 a
	AMS	2.5	lb/a	pre						
5	Roundup Weathermax	0.75	lb ai/a	pre	1 b	0 b	0 a	58 b	75 a	49 b
	AMS	2.5	lb/a	pre						
6	A12453 (Expert)	3.04285	lb ai/a	e post	0 b	0 b	0 a	72 ab	88 a	93 a
7	A12453 (Expert)	3.65	lb ai/a	e post	5 b	3 b	0 a	80 ab	84 a	100 a
8	Field Master	4.25	lb ai/a	e post	0 b	0 b	0 a	65 ab	83 a	94 a
9	Roundup Weathermax	0.75	lb ai/a	e post	0 b	0 b	0 a	85 ab	90 a	98 a
	AMS	2.5	lb/a	e post						
10	Roundup Weathermax	0.75	lb ai/a	pre	0 b	0 b	0 a	89 ab	100 a	99 a
	AMS	2.5	lb/a	pre						
	Roundup Weathermax	0.5625	lb ai/a	e post						
	AMS	2.5	lb/a	e post						

	1	2	3	4	5	6
LSD (P=.05)	8.0	6.6	6.5	21.3	17.5	19.4
Standard Deviation	5.5	4.5	4.5	14.7	12.1	13.4
CV	143.93	142.23	426.98	20.08	14.79	16.11
Grand Mean	3.83	3.18	1.05	73.08	81.63	83.13
Bartlett's X2	7.976	0.847	0.0	26.431	9.834	21.877
P(Bartlett's X2)	0.092	0.838	.	0.001*	0.08	0.001*
Replicate F	0.874	0.632	1.000	3.136	5.845	2.449
Replicate Prob(F)	0.4667	0.6006	0.4079	0.0418	0.0033	0.0853
Treatment F	4.458	5.866	2.194	15.258	24.633	24.504
Treatment Prob(F)	0.0012	0.0002	0.0554	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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Weed Code				ABUTH		AMBTR	ABUTH	CHEAL	PANDI
Crop Code					ZEAMX				
Part Rated									
Rating Data Type									
Rating Unit									
Rating Date				6/Jun/2003	12/Jun/2003	12/Jun/2003	12/Jun/2003	12/Jun/2003	12/Jun/2003
Crop Stage					V3-V4				
Crop Stage Scale					4-6"				
Weed Stage				1"		2-12"	1-3"	1-6"	1-2"
Weed Density, Unit				1 FT2		5 FT2	1 M2	1 FT2	3 FT2
Assessed By									
Trt-Eval Interval				24 DA-A	30 DA-A	13 DA-B	13 DA-B	13 DA-B	13 DA-B
# Subsamples, Dec.				0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	7	8	9	10	11	12
1	Untreated				0 c	0 a	0 b	0 c	0 d	0 c
2	A12453 (Expert)	3.65	lb ai/a	pre	97 a	0 a	83 a	91 ab	100 a	100 a
	AMS	2.5	lb/a	pre						
3	A12453 (Expert)	4.55714	lb ai/a	pre	100 a	0 a	85 a	95 ab	100 a	100 a
	AMS	2.5	lb/a	pre						
4	Field Master	4.25	lb ai/a	pre	100 a	7 a	92 a	98 ab	100 a	100 a
	AMS	2.5	lb/a	pre						
5	Roundup Weathermax	0.75	lb ai/a	pre	56 b	0 a	8 b	8 c	8 c	5 b
	AMS	2.5	lb/a	pre						
6	A12453 (Expert)	3.04285	lb ai/a	e post	75 ab	0 a	82 a	94 ab	100 a	100 a
7	A12453 (Expert)	3.65	lb ai/a	e post	90 a	0 a	89 a	100 a	100 a	100 a
8	Field Master	4.25	lb ai/a	e post	81 ab	0 a	85 a	96 ab	100 a	100 a
9	Roundup Weathermax	0.75	lb ai/a	e post	97 a	0 a	76 a	86 b	90 b	98 a
	AMS	2.5	lb/a	e post						
10	Roundup Weathermax	0.75	lb ai/a	pre	94 a	0 a	85 a	95 ab	100 a	100 a
	AMS	2.5	lb/a	pre						
	Roundup Weathermax	0.5625	lb ai/a	e post						
	AMS	2.5	lb/a	e post						

	7	8	9	10	11	12
LSD (P=.05)	22.3	6.4	10.6	8.2	5.9	3.4
Standard Deviation	15.3	4.4	7.3	5.6	4.1	2.3
CV	19.4	632.46	10.67	7.37	5.1	2.91
Grand Mean	79.05	0.7	68.48	76.25	79.75	80.25
Bartlett's X2	22.693	0.0	5.541	6.9	1.863	0.061
P(Bartlett's X2)	0.001*	.	0.594	0.439	0.172	0.805
Replicate F	3.886	1.000	2.381	0.765	0.553	1.678
Replicate Prob(F)	0.0198	0.4079	0.0916	0.5234	0.6505	0.1952
Treatment F	16.355	1.000	88.669	187.082	390.319	1230.966
Treatment Prob(F)	0.0001	0.4635	0.0001	0.0001	0.0001	0.0001

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				ZEAMX	AMBTR	ABUTH	CHEAL	PANDI
Weed Code								
Crop Code				ZEAMX				
Part Rated								
Rating Data Type				stunting				
Rating Unit								
Rating Date				10/Jul/2003	10/Jul/2003	10/Jul/2003	10/Jul/2003	10/Jul/2003
Crop Stage				V7				
Crop Stage Scale				36"				
Weed Stage					12-36"	6-12"	6-18"	6-18"
Weed Density, Unit					5 FT2	1 M2	1 FT2	3 FT2
Assessed By				Reece & Jeff	Reece & Jeff	Reece & Jeff	Reece & Jeff	Reece & Jeff
Trt-Eval Interval				41 DA-B	41 DA-B	41 DA-B	41 DA-B	41 DA-B
# Subsamples, Dec.				0	0	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	13	14	15	16	17
1	Untreated				0 a	0 c	0 b	0 c	0 d
2	A12453 (Expert)	3.65	lb ai/a	pre	0 a	35 b	85 a	100 a	100 a
	AMS	2.5	lb/a	pre					
3	A12453 (Expert)	4.55714	lb ai/a	pre	0 a	40 b	97 a	90 a	100 a
	AMS	2.5	lb/a	pre					
4	Field Master	4.25	lb ai/a	pre	6 a	65 ab	81 a	100 a	98 a
	AMS	2.5	lb/a	pre					
5	Roundup Weathermax	0.75	lb ai/a	pre	0 a	0 c	0 b	0 c	0 d
	AMS	2.5	lb/a	pre					
6	A12453 (Expert)	3.04285	lb ai/a	e post	0 a	69 ab	74 a	100 a	93 ab
7	A12453 (Expert)	3.65	lb ai/a	e post	0 a	84 a	85 a	100 a	96 ab
8	Field Master	4.25	lb ai/a	e post	0 a	83 a	90 a	100 a	95 ab
9	Roundup Weathermax	0.75	lb ai/a	e post	3 a	33 b	66 a	70 b	72 c
	AMS	2.5	lb/a	e post					
10	Roundup Weathermax	0.75	lb ai/a	pre	0 a	45 b	68 a	63 b	76 bc
	AMS	2.5	lb/a	pre					
	Roundup Weathermax	0.5625	lb ai/a	e post					
	AMS	2.5	lb/a	e post					

	ZEAMX	AMBTR	ABUTH	CHEAL	PANDI
LSD (P=.05)	5.9	24.3	24.2	15.9	15.4
Standard Deviation	4.1	16.7	16.7	10.9	10.6
CV	467.54	37.01	25.84	15.13	14.52
Grand Mean	0.88	45.18	64.55	72.25	72.9
Bartlett's X2	2.193	14.213	13.402	1.012	39.699
P(Bartlett's X2)	0.139	0.048*	0.063	0.603	0.001*
Replicate F	1.830	2.020	1.056	2.921	2.384
Replicate Prob(F)	0.1655	0.1347	0.3841	0.0521	0.0914
Treatment F	1.000	13.110	17.935	54.676	56.005
Treatment Prob(F)	0.4635	0.0001	0.0001	0.0001	0.0001

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Weed Code				IPOHE		AMBTR	PANDI	
Crop Code					ZEAMX			ZEAMX
Part Rated								GRAIN
Rating Data Type								WEIFRE
Rating Unit								LB
Rating Date				10/Jul/2003	7/Aug/2003	7/Aug/2003	7/Aug/2003	29/Oct/2003
Crop Stage					R2			
Crop Stage Scale					8'			
Weed Stage				2-4"		9'	2-4'	
Weed Density, Unit				1 FT2		5 FT2	3 FT2	
Assessed By				Reece & Jeff	Reece & Earl	Reece & Earl	Reece & Earl	
Trt-Eval Interval				41 DA-B	69 DA-B	69 DA-B	69 DA-B	152 DA-B
# Subsamples, Dec.				0	0	0	0	
Trt	Treatment		Rate	Grow				
No.	Name	Rate	Unit	Stg	18	19	20	21	22

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	18	19	20	21	22
1	Untreated				0 b	0 a	0 c	0 c	5 d
2	A12453 (Expert)	3.65	lb ai/a	pre	75 a	0 a	52 ab	98 a	16 bc
	AMS	2.5	lb/a	pre					
3	A12453 (Expert)	4.55714	lb ai/a	pre	85 a	0 a	35 bc	100 a	18 bc
	AMS	2.5	lb/a	pre					
4	Field Master	4.25	lb ai/a	pre	68 a	0 a	58 ab	93 a	23 ab
	AMS	2.5	lb/a	pre					
5	Roundup Weathermax	0.75	lb ai/a	pre	0 b	0 a	0 c	0 c	7 cd
	AMS	2.5	lb/a	pre					
6	A12453 (Expert)	3.04285	lb ai/a	e post	78 a	0 a	69 ab	93 a	26 ab
7	A12453 (Expert)	3.65	lb ai/a	e post	69 a	0 a	90 a	95 a	33 a
8	Field Master	4.25	lb ai/a	e post	86 a	0 a	75 ab	92 a	33 a
9	Roundup Weathermax	0.75	lb ai/a	e post	68 a	0 a	43 abc	69 ab	22 ab
	AMS	2.5	lb/a	e post					
10	Roundup Weathermax	0.75	lb ai/a	pre	84 a	0 a	30 bc	51 b	18 bc
	AMS	2.5	lb/a	pre					
	Roundup Weathermax	0.5625	lb ai/a	e post					
	AMS	2.5	lb/a	e post					

	18	19	20	21	22
LSD (P=.05)	20.4	0.0	31.7	24.3	8.7
Standard Deviation	14.1	0.0	21.8	16.8	6.0
CV	23.02	0.0	48.46	24.32	29.73
Grand Mean	61.1	0.0	45.05	68.9	20.18
Bartlett's X2	7.718	0.0	7.365	38.892	11.962
P(Bartlett's X2)	0.358	.	0.392	0.001*	0.215
Replicate F	3.801	0.000	2.119	2.592	5.445
Replicate Prob(F)	0.0215	1.0000	0.1211	0.0733	0.0046
Treatment F	21.937	0.000	7.540	21.996	9.921
Treatment Prob(F)	0.0001	1.0000	0.0001	0.0001	0.0001

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Weed Code					
Crop Code				ZEAMX	ZEAMX
Part Rated				GRAIN	GRAIN
Rating Data Type				MOICON	YIELD
Rating Unit				%	bu/ac
Rating Date				29/Oct/2003	29/Oct/2003
Crop Stage					
Crop Stage Scale					
Weed Stage					
Weed Density, Unit					
Assessed By					
Trt-Eval Interval				152 DA-B	152 DA-B
# Subsamples, Dec.					
Trt Treatment		Rate	Grow		
No. Name	Rate	Unit	Stg	23	24
1 Untreated				24 a	17 c
2 A12453 (Expert)	3.65	lb ai/a	pre	28 a	52 bc
AMS	2.5	lb/a	pre		
3 A12453 (Expert)	4.55714	lb ai/a	pre	28 a	60 bc
AMS	2.5	lb/a	pre		
4 Field Master	4.25	lb ai/a	pre	31 a	75 ab
AMS	2.5	lb/a	pre		
5 Roundup Weathermax	0.75	lb ai/a	pre	31 a	23 c
AMS	2.5	lb/a	pre		
6 A12453 (Expert)	3.04285	lb ai/a	e post	26 a	88 ab
7 A12453 (Expert)	3.65	lb ai/a	e post	26 a	113 a
8 Field Master	4.25	lb ai/a	e post	26 a	112 a
9 Roundup Weathermax	0.75	lb ai/a	e post	30 a	72 ab
AMS	2.5	lb/a	e post		
10 Roundup Weathermax	0.75	lb ai/a	pre	28 a	61 bc
AMS	2.5	lb/a	pre		
Roundup Weathermax	0.5625	lb ai/a	e post		
AMS	2.5	lb/a	e post		
LSD (P=.05)				7.8	31.6
Standard Deviation				5.4	21.8
CV				19.34	32.32
Grand Mean				27.91	67.42
Bartlett's X2				10.934	11.705
P(Bartlett's X2)				0.28	0.23
Replicate F				3.229	3.783
Replicate Prob(F)				0.0380	0.0219
Treatment F				0.795	8.836
Treatment Prob(F)				0.6236	0.0001

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