

(04RRC2)

Ohio State University
Horticulture and Crop Science

ROUNDUP READY CORN STACKED TRAIT TRIAL

Trial ID: 04RRC2 Study Dir.: Anthony F. Dobbels
Location: WESTERN BRANCH F-6 Investigator: Dr. Mark M. Loux

GENERAL TRIAL INFORMATION

Study Director: Anthony F. Dobbels
Investigator: Dr. Mark M. Loux

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

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. ABUTH	Velvetleaf	Abutilon theophrasti
2. AMBTR	Ragweed, giant	Ambrosia trifida
3. CHEAL	Lambsquarters, common	Chenopodium album

Crop 1: ZEAMX CORN, FIELD Variety: VARIOUS
Planting Date: 5-10-04 Planting Method: JOHN DEERE 7200
Rate: 32097 SEED/A Depth: 1.5 IN
Row Spacing: 30 IN Seed Bed: CONVENTIONAL

SITE AND DESIGN

Plot Width, Unit: 10 FT Plot Length, Unit: 40 FT Reps: 4
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% OM: 4.4 Texture: silty clay loam
pH: 6.2 Soil Name: Kokomo
CEC: 15

APPLICATION DESCRIPTION

	A	B
Application Date:	5-11-04	6-7-04
Time of Day:	9:00 A.M.	8:00 A.M.
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	69 F	80 F
% Relative Humidity:	74	45
Wind Velocity, Unit:	3 W	8 S
Soil Temp., Unit:	62 F	75 F
Soil Moisture:	DRY/MOIST	DRY/MOIST
% Cloud Cover:	15	5

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	ZEAMX	ZEAMX
Stage Scale:		5 COLLARS
Height, Unit:		16 IN

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WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	ABUTH	ABUTH 0.5"
Stage Scale:		2 LVS
Density, Unit:		2 M2
Weed 2 Code, Stage:	AMBTR	AMBTR 2"
Stage Scale:		2 LVS
Density, Unit:		4 M2
Weed 3 Code, Stage:	CHEAL	CHEAL 1"
Stage Scale:		2-4 LVS
Density, Unit:		5 M2

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	TRACTOR	BACKPACK
Operating Pressure:	40 PSI	50
Nozzle Type:	AI	DG
Nozzle Size:	111002	11002
Nozzle Spacing, Unit:	20 IN	18 IN
Ground Speed, Unit:	3.5 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	20 GPA
Propellant:	PUMP	CO2

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Weed Code			
Crop Code	ZEAMX	ZEAMX	ZEAMX
Rating Data Type	WEIGHT	MOISTURE	YIELD
Rating Unit	LBS	PERCENT	BU/ACRE
Rating Date	10-8-04	10-8-04	10-8-04
Crop Stage			
Crop Stage Scale			
Trt-Eval Interval	HARVEST	HARVEST	HARVEST
ARM Action Codes			TY1
# Subsamples, Dec.	1	1	1

Trt No.	Treatment Name	Product Rate	Product Unit	Grow Stg	Appl Code	18	19	20
6	DKC 63-80 RR2					62.4 a	20.5 bcd	228.2 a
6	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
6	STEADFAST ATZ	14	oz/a	POST	B			
6	DISTINCT	2	oz/a	POST				
6	COC	0.8	qt/a	POST				
6	28 %	2	qt/a	POST				
7	PIONEER 33P65 RR2					54.7 c-f	21.7 b	196.9 c-f
7	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
7	ROUNDUP WEATHERMAX	22	oz/a	POST	B			
7	AMS	4	qt/a	POST				
8	PIONEER 33P65 RR2					57.5 a-d	21.3 bc	208.0 a-d
8	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
8	STEADFAST ATZ	14	oz/a	POST	B			
8	DISTINCT	2	oz/a	POST				
8	COC	0.8	qt/a	POST				
8	28 %	2	qt/a	POST				
9	DKC 64-11 RR2/YGCB					52.7 d-g	19.3 cde	195.4 c-f
9	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
9	ROUNDUP WEATHERMAX	22	oz/a	POST	B			
9	AMS	4	qt/a	POST				
10	DKC 64-11 RR2/YGCB					48.7 g	18.7 de	181.9 f
10	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
10	STEADFAST ATZ	14	oz/a	POST	B			
10	DISTINCT	2	oz/a	POST				
10	COC	0.8	qt/a	POST				
10	28 %	2	qt/a	POST				
11	PIONEER 34B20 RR2/YG					50.2 fg	18.5 de	188.2 def
11	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
11	ROUNDUP WEATHERMAX	22	oz/a	POST	B			
11	AMS	4	qt/a	POST				

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Rating Unit	LBS	PERCENT	BU/ACRE
Rating Date	10-8-04	10-8-04	10-8-04
Crop Stage			
Crop Stage Scale			
Trt-Eval Interval	HARVEST	HARVEST	HARVEST
ARM Action Codes			TY1
# Subsamples, Dec.	1	1	1

Trt No.	Treatment Name	Product Rate	Product Unit	Grow Stg	Appl Code	18	19	20
12	PIONEER 34B20 RR2/YG					53.1 d-g	18.0 e	200.0 c-f
12	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
12	STEADFAST ATZ	14	oz/a	POST	B			
12	DISTINCT	2	oz/a	POST				
12	COC	0.8	qt/a	POST				
12	28 %	2	qt/a	POST				
13	DKC 63-81 RR2/YGCB					59.1 abc	20.6 bcd	215.7 abc
13	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
13	ROUNDUP WEATHERMAX	22	oz/a	POST	B			
13	AMS	4	qt/a	POST				
14	DKC 63-81 RR2/YGCB					59.0 abc	20.7 bcd	215.1 abc
14	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
14	STEADFAST ATZ	14	oz/a	POST	B			
14	DISTINCT	2	oz/a	POST				
14	COC	0.8	qt/a	POST				
14	28 %	2	qt/a	POST				
15	PIONEER 33P70 RR2/YG					51.7 efg	24.3 a	180.1 f
15	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
15	ROUNDUP WEATHERMAX	22	oz/a	POST	B			
15	AMS	4	qt/a	POST				
16	PIONEER 33P70 RRS/YG					52.2 d-g	22.6 ab	185.8 ef
16	HARNESS XTRA 5.6	1.2	qt/a	PRE	A			
16	STEADFAST ATZ	14	oz/a	POST	B			
16	DISTINCT	2	oz/a	POST				
16	COC	0.8	qt/a	POST				
16	28 %	2	qt/a	POST				
LSD (P=.05)						5.70	2.21	20.49
Standard Deviation						3.99	1.54	14.34
CV						7.22	7.69	7.06

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Rating Date	10-8-04	10-8-04	10-8-04
Crop Stage			
Crop Stage Scale			
Trt-Eval Interval	HARVEST	HARVEST	HARVEST
ARM Action Codes			TY1
# Subsamples, Dec.	1	1	1

Trt	Treatment	Product	Product	Grow	Appl				
No.	Name	Rate	Rate	Unit	Stg	Code	18	19	20
Replicate F							7.032	4.259	5.571
Replicate Prob(F)							0.0006	0.0099	0.0024
Treatment F							4.024	6.267	4.020
Treatment Prob(F)							0.0001	0.0001	0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Column 3: TY1 = $3.889286 * [18] * (100 - [19]) / 84.5$