

The Effect of Headline on Corn Seed Quality and Yield.

Project Code: 04-WF-SWN60 Location: Belleville Research Center
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
Trial Status: Final Updated: 10-28-04

Objective:

To assess effects of Headline on corn seed quality and yield.

Weed Code Common Name Scientific Name
1. NA

Crop 1: ZEAMX corn, field Variety: P33P69 LL
Planting Method: Seeded Planting Date: 6-4-04
Rate: 28000 S/A Depth: 1.5 IN
Row Spacing: 30 IN

Plot Width, Unit: 10 FT Plot Length, Unit: 25 FT Reps: 4
Tillage Type: Reduced-Till Study Design: Randomized complete block
Previous Crop, Year: GLXMA, 2003

Field Prep./Maintenance: N 150 LB/A, P205 50 LB/A, K20 100 LB/A

Soil Name: Ebbert % OM: 2.8 pH: 6.3 CEC: 11
Texture: Silt loam Fert. Level: P1: 76 LB/A, K: 407 LB/A

APPLICATION DESCRIPTION

	A	B	C	D	E
Application Date:	6-21-04	6-30-04	7-9-04	7-26-04	8-6-04
Time of Day:	17:00	11:00	14:00	11:00	9:00
Application Method:	Spray	Spray	Spray	Spray	Spray
Application Timing:	V3	V6	V9	V14	VTASSEL
Applic. Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	81 F	82 F	86 F	76 F	51 F
% Relative Humidity:	80	42	62	90	74
Wind Velocity, Unit:	4 MPH	3 MPH	3 MPH	4 MPH	0 MPH
Soil Moisture:	NORMAL	BELNOR	ABONOR	ABONOR	NORMAL

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E
Crop 1 Code, Stage:	ZEAMX V4	ZEAMX V6	ZEAMX V9	ZEAMX V14	ZEAMX VT
Height, Unit:	6-7 IN	11-12 IN	26-28 IN	65-68 IN	90-99 IN

APPLICATION EQUIPMENT

	A	B	C	D	E
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI	40 PSI	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	8003	8003	8003	8003	8003
Boom Length, Unit:	5 FT	5 FT	5 FT	5 FT	5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA

NOTES:

Harvested 10-22-04, (2) 30 inch rows x 22 ft.

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Weed Code		
Crop Code	ZEAMX	ZEAMX
Rating Data Type	Moisture	Yield
Rating Unit	Percent	bu/A
Rating Date	10-22-04	10-22-04
Trt-Eval Interval		

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code		
1	NONTREATED									21	155
2	HEADLINE	2.09	EC	0.1	LB A/A	6.14	FL OZ/A	V4	A	22	148
2	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V4	A		
3	HEADLINE	2.09	EC	0.1	LB A/A	6.14	FL OZ/A	V6	B	22	152
3	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V6	B		
4	HEADLINE	2.09	EC	0.1	LB A/A	6.14	FL OZ/A	V9	C	22	168
4	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V9	C		
5	HEADLINE	2.09	EC	0.1	LB A/A	6.14	FL OZ/A	V14	D	23	165
5	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V14	D		
6	HEADLINE	2.09	EC	0.1	LB A/A	6.14	FL OZ/A	VTASSLE	E	23	176
6	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	VTASSLE	E		
7	HEADLINE	2.09	EC	0.15	LB A/A	9.2	FL OZ/A	V4	A	22	180
7	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V4	A		
8	HEADLINE	2.09	EC	0.15	LB A/A	9.2	FL OZ/A	V6	B	21	164
8	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V6	B		
9	HEADLINE	2.09	EC	0.15	LB A/A	9.2	FL OZ/A	V9	C	22	164
9	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V9	C		
10	HEADLINE	2.09	EC	0.15	LB A/A	9.2	FL OZ/A	V14	D	22	152
10	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V14	D		
11	HEADLINE	2.09	EC	0.15	LB A/A	9.2	FL OZ/A	VTASSLE	E	23	184
11	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	VTASSLE	E		
12	HEADLINE	2.09	EC	0.05	LB A/A	3.06	FL OZ/A	V9	C	22	163
12	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V9	C		
13	HEADLINE	2.09	EC	0.05	LB A/A	3.06	FL OZ/A	V14	D	23	171
13	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	% V/V	V14	D		
14	QUADRIIS	2.08	F	0.1	LB A/A	6.15	FL OZ/A	VTASSLE	E	24	189
15	NONTREATED									21	169
LSD (P=.05)										1.2	22.0
Replicate F										2.919	1.907
Replicate Prob(F)										0.0451	0.1431
Treatment F										3.936	2.406
Treatment Prob(F)										0.0003	0.0142

Trial Comments

1. Protocol: BASF.
2. Ratings: Assess disease control if present; yield, seed samples.
3. Blanket of Guardsman Max (4pt) PRE followed by Distinct (4oz)
+ NIS (0.25%) + AMS (2.5 lb) at 12" corn, to all plots 10 ft wide.
4. Spray width is 5 FT, center of plot.
5. No observable crop injury at 14 and 30 DAT. No observable diseases as of 9-1-04.
6. Harvested 10-22-04, (2) 30 inch rows x 22 ft.