

Ohio State University  
Horticulture and Crop Science

Roundup Ready / Liberty Link Corn Systems Trial

Title No. 2:

Trial ID: 09RRLSYS                      Protocol ID: 09RRLSYS  
Location: WESTERN BRANCH BIG E S      Study Director: Anthony F. Dobbels  
Project ID:                                  Investigator: Dr. Mark M. Loux  
Sponsor Contact:

**General Trial Information**

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

**Trial Location**

**City:** South Charleston  
**State/Prov.:** Ohio  
**Postal Code:** 45368  
**Country:** USA

**Crop Description**

**Crop 1:** ZEAMX Zea mays                      Corn  
**Variety:** Seed Consultants 11HQ38      **Description:** RR/LL  
**BBCH Scale:** BCOR                              **Planting Date:** Apr-26-2009  
**Planting Method:** ESTABL      established      **Rate, Unit:** 32097 S/A  
**Depth, Unit:** 1.5      IN  
**Row Spacing, Unit:** 30      IN  
**Seed Bed:** SMOOTH      smooth  
**Soil Moisture:** NORMAL      normal

**Pest Description**

- Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 2 Type:** W **Code:** AMARE *Amaranthus retroflexus*  
**Common Name:** Redroot pigweed
- Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters
- Pest 4 Type:** W **Code:** POLPY *Polygonum pensylvanicum*  
**Common Name:** Pennsylvania smartweed
- Pest 5 Type:** W **Code:** SOLPT *Solanum ptycanthum*  
**Common Name:** Eastern black nightshade
- Pest 6 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 7 Type:** W **Code:** TARSS *Taraxacum sp.*  
**Common Name:** Dandelion

**Site and Design**

**Plot Width, Unit:** 10 FT  
**Plot Length, Unit:** 30 FT  
**Plot Area, Unit:** 300 FT2  
**Replications:** 4                      **Study Design:** RACOBL Randomized Complete Block (RCB)

**Application Description**

Ohio State University  
Horticulture and Crop Science

	A	B	C
<b>Application Date:</b>	Apr-27-2009	May-20-2009	Jun-5-2009
<b>Time of Day:</b>	7:30 AM	8:30 AM	8:00 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	EPO	POST
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Air Temperature, Unit:</b>	67 F	73.5 F	62 F
<b>% Relative Humidity:</b>	59	36	84
<b>Wind Velocity, Unit:</b>	7.1 MPH	7 MPH	5 MPH
<b>Wind Direction:</b>	SW	S	S
<b>Dew Presence (Y/N):</b>	N no	N no	N no
<b>Soil Temperature, Unit:</b>	56 F	59 F	58 F
<b>Soil Moisture:</b>	Normal	NORMAL	MOIST
<b>% Cloud Cover:</b>	5	0	0

**Crop Stage At Each Application**

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH	BBCH
<b>Stage Majority, Percent:</b>		13 100	15 100
<b>Height, Unit:</b>		5 IN	14 IN
<b>Height Minimum, Maximum:</b>		5 5	12 14

**Pest Stage At Each Application**

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Stage Majority, Percent:</b>		13 100	15 100
<b>Height, Unit:</b>		3 IN	6 in
<b>Height Minimum, Maximum:</b>		1 3	5 7
<b>Pest 2 Code, Type, Scale:</b>	AMARE W	AMARE W	AMARE W
<b>Stage Majority, Percent:</b>		12 100	
<b>Height, Unit:</b>		0.25 IN	
<b>Height Minimum, Maximum:</b>		0.25 0.5	
<b>Pest 3 Code, Type, Scale:</b>	CHEAL W	CHEAL W	CHEAL W
<b>Stage Majority, Percent:</b>		12 100	
<b>Height, Unit:</b>		0.5 IN	
<b>Height Minimum, Maximum:</b>		0.25 0.5	
<b>Pest 4 Code, Type, Scale:</b>	POLPY W	POLPY W	POLPY W
<b>Stage Majority, Percent:</b>		12 100	14 100
<b>Height, Unit:</b>		0.5 IN	4 IN
<b>Height Minimum, Maximum:</b>		0.25 0.5	2 5
<b>Pest 5 Code, Type, Scale:</b>	SOLPT W	SOLPT W	SOLPT W
<b>Stage Majority, Percent:</b>		12 100	
<b>Height, Unit:</b>		0.5 IN	
<b>Height Minimum, Maximum:</b>		0.25 0.5	
<b>Pest 6 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Stage Majority, Percent:</b>		14 100	18 100
<b>Height, Unit:</b>		4 IN	7 IN
<b>Height Minimum, Maximum:</b>		2 4	5 7
<b>Pest 7 Code, Type, Scale:</b>	TARSS W	TARSS W	TARSS W
<b>Stage Majority, Percent:</b>			65 100
<b>Diameter, Unit:</b>			12 IN
<b>Height, Unit:</b>			16 IN
<b>Height Minimum, Maximum:</b>			10 16

**Application Equipment**

Ohio State University  
Horticulture and Crop Science

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Appl. Equipment:</b>	BACKPACK	BACKPACK	BACKPACK
<b>Equipment Type:</b>		SPRBAC	SPRBAC
<b>Operating Pressure, Unit:</b>	53 PSI	53 PSI	53 PSI
<b>Nozzle Type:</b>	TEEJET DG	TEEJET DG	TEEJET DG
<b>Nozzle Size:</b>	11002	11002	11002
<b>Nozzle Spacing, Unit:</b>	18 IN	18 IN	18 IN
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	20 IN	20 IN	20 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	20 GPA	20 GPA	20 GPA
<b>Mix Size, Unit:</b>	3 L	3 L	3 L
<b>Propellant:</b>	CO2	CO2	CO2



Ohio State University  
Horticulture and Crop Science

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot No.				Notes
										Rep. 1	2	3	4	
	Laudis	3.5	SC	0.082	lb ai/a	3	oz/a	B	EPO					
	COC	100	L	1	% v/v	0.8	qt/a	B	EPO					
	N-PAK AMS	100	L	5	% v/v	4	qt/a	B	EPO					
14	Lexar	3.7	SE	1.85	lb ai/a	2	qt/a	B	EPO	114	203	310	404	_____
	Laudis	3.5	SC	0.082	lb ai/a	3	oz/a	B	EPO					
	COC	100	L	1	% v/v	0.8	qt/a	B	EPO					
	N-PAK AMS	100	L	5	% v/v	4	qt/a	B	EPO					
15	Bicep II Magnum	5.5	EC	1.65	lb ai/a	1.2	qt/a	B	EPO	115	202	316	410	_____
	Steadfast	75	WG	0.035	lb ai/a	0.75	oz/a	B	EPO					
	COC	100	SL	1	% v/v	0.8	qt/a	B	EPO					
	N-PAK AMS	100	L	5	% v/v	4	qt/a	B	EPO					
16	Lexar	3.7	SE	1.85	lb ai/a	2	qt/a	B	EPO	116	205	312	414	_____
	Steadfast	75	WG	0.035	lb ai/a	0.75	oz/a	B	EPO					
	COC	100	SL	1	% v/v	0.8	qt/a	B	EPO					
	N-PAK AMS	100	L	5	% v/v	4	qt/a	B	EPO					
12	Lexar	3.7	SE	1.85	lb ai/a	2	qt/a	B	EPO	117	217	317	416	_____
	Ignite	2.34	EC	0.402	lb ai/a	22	oz/a	B	EPO					
	N-PAK AMS	100	L	5	% v/v	4	qt/a	B	EPO					

Sort Order: Replicate 1