

Endigo in Corn.

Trial ID: 09-ARC-5-E70

Location: Agronomy Res. Center

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 City State Zip Country: Carbondale IL 62901 USA
 Trial Status: FINAL Initiation Date: 06-01-09

Objectives: To evaluate the effectiveness of Endigo 2.06ZC to protect corn silks and yield from corn rootworm adults and Japanese beetles.

Crop 1: ZEAMD Dent corn	Variety: P33K44	Description: RR/LL
Planting Method: SEEDS	Planting Date: 06-01-09	
Rate, Unit: 28000 S/A	Depth, Unit: 1.5 IN	
Row Spacing, Unit: 30 IN		

Plot Width, Unit: 10 FT	Site Type: FIELD
Plot Length, Unit: 30 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, P205 138 LB/A, K20 0 LB/A

% OM: 1.8	Texture: SILT LOAM
pH: 6.5	Soil Name: STGY
CEC: 8.2	Fert. Level: P1: 61 LB/A, K: 282 LB/A

Application Description A

Application Date:	08-05-09
Time of Day:	16:30
Application Method:	Spray
Application Timing:	THRSH
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	83 F
% Relative Humidity:	68
Wind Velocity, Unit:	3 MPH
Wind Direction:	NW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	79 F
Soil Moisture:	ABONOR
% Cloud Cover:	10

	08-05-09
Crop stage at application:	R2
Height Min, Max (inch):	110 118

Pest Stage At Each Application

Application Date:	08-05-09
Weed Code:	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	5 FT
Spray Volume, Unit:	20 GPA

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

ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
11-09-09	11-09-09	11-09-09	08-04-09	08-08-09	08-12-09	08-19-09
Moisture	Test wt.	Yield	Jap Beetle	Jap Beetle	Jap Beetle	Jap Beetle
Percent	lb/bu	bu/A	#/10 ear	#/10 ear	#/10 ear	#/10 ear
			-1 DA-A	3 DA-A	7 DA-A	14 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	ENDIGO	2.06	SC	0.0563	lb ai/a	3.5	fl oz/a	THRSH A		15.8 b	54.5 a	188 a	2.0 a	0.3 b
2	ENDIGO	2.06	SC	0.0724	lb ai/a	4.5	fl oz/a	THRSH A		15.9 b	54.3 a	177 a	0.8 a	0.5 b
3	WARRIOR II	2.09	CS	0.021	lb ai/a	1.28	fl oz/a	THRSH A		16.4 a	54.5 a	187 a	1.5 a	0.5 b
4	WARRIOR II	2.09	CS	0.0314	lb ai/a	1.92	fl oz/a	THRSH A		15.9 b	54.4 a	165 a	1.3 a	0.5 b
5	HERO	1.24	EC	0.0388	lb ai/a	4	fl oz/a	THRSH A		16.0 ab	54.3 a	175 a	3.0 a	0.8 b
6	NONTREATED									16.0 ab	54.4 a	190 a	0.5 a	2.8 a
LSD (P=.05)										0.43	1.06	31.4	3.49	1.95
Replicate F										1.658	2.385	2.183	3.789	3.607
Replicate Prob(F)										0.2184	0.1100	0.1324	0.0332	0.0384
Treatment F										2.127	0.066	0.829	0.615	2.075
Treatment Prob(F)										0.1183	0.9964	0.5483	0.6904	0.1256

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

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Pest Code				
Crop Code				
Rating Date	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Rating Data Type	08-04-09	08-08-09	08-12-09	08-19-09
Rating Unit	Silk Clip	Silk Clip	Silk Clip	Silk Clip
Rating Timing	Percent	Percent	Percent	Percent
Trt-Eval Interval	-1 DA-A	3 DA-A	7 DA-A	14 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	ENDIGO	2.06	SC	0.0563	lb ai/a	3.5	fl oz/a	THRSH A		3.0 a	2.0 b	4.3 a	4.0 a
2	ENDIGO	2.06	SC	0.0724	lb ai/a	4.5	fl oz/a	THRSH A		1.3 a	0.0 b	3.5 a	3.8 ab
3	WARRIOR II	2.09	CS	0.021	lb ai/a	1.28	fl oz/a	THRSH A		1.3 a	0.8 b	3.8 a	0.8 b
4	WARRIOR II	2.09	CS	0.0314	lb ai/a	1.92	fl oz/a	THRSH A		1.3 a	0.8 b	4.3 a	4.0 a
5	HERO	1.24	EC	0.0388	lb ai/a	4	fl oz/a	THRSH A		2.5 a	2.5 ab	5.5 a	3.8 ab
6	NONTREATED									2.5 a	5.0 a	5.5 a	3.5 ab
LSD (P=.05)										4.11	2.57	4.13	3.17
Replicate F										3.714	8.161	9.639	7.583
Replicate Prob(F)										0.0353	0.0019	0.0009	0.0026
Treatment F										0.342	4.471	0.392	1.431
Treatment Prob(F)										0.8794	0.0108	0.8464	0.2695

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

Trial Comments

1. Protocol: Syngenta (ITH001A3).
2. Ratings: Pre-counts of insects along with 3, 7 and 14 day post application counts.
(If this trial is done on a five day spray schedule pre-counts would be taken along with three and five day counts - five day counts would come prior to sequential application.) Evaluate 10 ears/plot.
Percent of silk clipping - 3, 7 and 14 da post application.
3. Yield.
4. Make applications after R1 when corn rootworm adults or Japanese beetles reach economic thresholds.
This would be five per ear for rootworm adults or three per ear for Japanese beetle.
Multiple applications may be required. If so, apply on a spray schedule with a maximum of 4 applications.
5. Blanket PRE application of Lumax (2.5 qt/A) + Aatrex (1 qt/A) to the entire plot area was applied on 6-2-09.
6. Jap Beetle, #/10 ear = Japanese beetles, number per 10 ears.
7. Harvested 11-9-09, (2) 30 inch rows by 27 ft.