

Applied Research Report

Comparison of Avicta and Cruiser Seed Treatments in Corn

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Summary

A trial was conducted with the purpose of comparing corn seed treatments Avicta and Cruiser. Insect populations were relatively low and yield was limited by drought conditions. No benefits or plant injury was detected between the different insecticidal seed treatments.

Materials and Methods

A trial was established on 19 March 2009 in a randomized complete block with four replications. Plots were 4 rows, the length of the field.

Treatments were as follows:

1. Avicta
2. Cruiser

Data collected included chinch bugs counts 14, 21, 28 and 35 days after planting and yield data at harvest on 22 July 2009.

Results and Discussion

Chinch bug numbers were not different between treatments until 28 and 35 days after planting (Table 1). At no time did the chinch bug population exceed economic threshold for any of the seed treatment plots. This difference was probably due to the different levels of the same insecticide applied as seed treatment.

No yield differences were detected (Table 2). Yield was drastically reduced due to lack of rainfall.

Table 1. Chinch bug population counts for corn seed treatments (Victoria County, 2009).

Rating Date	4/2/2009	4/9/2009	4/16/2009	4/23/2009
Rating Unit	bugs/10 plts	bugs/10 plts	bugs/10 plts	bugs/10 plts
Plant-Eval Interval	14 DP-1	21 DP-1	28 DP-1	35 DP-1
Crop Stage Majority	v1	v2	v5	v8
1 Avicta	0 a	0 a	1 b	3 b
2 Cruiser	0 a	0 a	3 a	9 a
LSD (P=.10)	0.3	0	1.6	5.4
Standard Deviation	0.2	0	1	3.3
CV	282.84	0	42.55	57.28
Treatment Prob(F)	0.391	1	0.0598	0.0764

Means followed by same letter do not significantly differ (P=.10, LSD)

Table 2. Harvest weight, bushel weight and percent moisture for corn seed treatments (Victoria County, 2009).

Description	Harvest Weight	Bushel Weight	% Moisture
Rating Date	7/22/2009	7/22/2009	7/22/2009
Rating Unit	lb/plot		
Plant-Eval Interval	125 DP-1	125 DP-1	125 DP-1
1 Avicta	453 a	53 a	9 a
2 Cruiser	414 a	53 a	9 a
LSD (P=.10)	72.9	1	0.8
Standard Deviation	43.8	0.6	0.5
CV	10.12	1.1	5.3
Treatment Prob(F)	0.2997	1	0.4719

Means followed by same letter do not significantly differ (P=.10, LSD)

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