

University of Tennessee

Evaluation of NPV Virus for Caterpillar Control in Grain Sorghum - Gibson Co.

Location: Research and Education Center at Milan

Variety: Pioneer 84P80 (planted: 6-15-18)

Application: 8-21-18; High clearance sprayer (9.4 GPA, 40 PSI, 8001FF)

Sample size: 10 heads per plot

Plots: 5 Rows x 40 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

Note: Heligen is a nucleopolyhedrovirus ((NPV), a biological product)) for control of corn earworm; Fawligen is a NPV for control of fall armyworm.

CEW = Corn earworm; FAW = Fall armyworm; SWW = Sorghum webworm

Description			CEW	CEW	CEW	FAW	SWW	CEW	CEW	CEW	FAW	SWW	Yield
Pest Stage Majority			Small	Large	Sm + Lg	Sm + Lg	Sm + Lg	Small	Large	Sm + Lg	Sm + Lg	Sm + Lg	Bu/A
Rating Date			8/27/2018	8/27/2018	8/27/2018	8/27/2018	8/27/2018	8/31/2018	8/31/2018	8/31/2018	8/31/2018	8/31/2018	11/27/2018
Trt-Eval Interval			6 DA-A	6 DA-A	6 DA-A	6 DA-A	6 DA-A	10 DA-A	10 DA-A	10 DA-A	10 DA-A	10 DA-A	98 DA-A
Treatment	Formulation	Rate											
1 Heligen	100 %	1.3 fl oz/a	17.75 a	4.00 b	21.75 a	0.00 a	2.75 a	4.75 b	5.25 b	10.00 c	0.50 a	0.75 a	79.7 a
2 Fawligen	100 %	1.3 fl oz/a	12.75 a	7.25 ab	20.00 a	0.00 a	1.25 ab	8.00 ab	13.50 a	21.50 a	0.00 a	1.25 a	74.7 a
3 Heligen	100 %	1.3 fl oz/a	13.25 a	6.00 ab	19.25 a	0.00 a	0.75 b	9.25 a	7.25 ab	16.50 ab	0.25 a	3.25 a	82.1 a
Fawligen	100 %	1.3 fl oz/a											
4 Prevathon	0.43 lb/gal	10 fl oz/a	0.50 b	0.00 c	0.50 b	0.00 a	0.25 b	0.50 c	0.25 c	0.75 d	0.00 a	0.25 a	84.3 a
5 Untreated			13.75 a	9.00 a	22.75 a	0.00 a	0.50 b	4.50 b	9.50 ab	14.00 bc	0.25 a	0.25 a	77.2 a
Treatment Prob(F)			0.0016	0.0007	0.0002	1.0000	0.0271	0.0001	0.0001	0.0001	0.2338	0.4244	0.3904

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