

## Evaluation of Intrepid for Control of Second Generation Southwestern Corn Borer in Corn (Field 5C)

Greg Cronholm

**Objective:** To evaluate a range of rates of Intrepid for southwestern corn borer control.

**Methodology:** Intrepid a newly labeled insect growth regulator for control southwestern corn borer was tested at 2, 4, 6 and 8 oz per acre and compared to standard pyrethroid treatment of Karate at 3.84 oz/a and an untreated control. Plots were randomized and replicated four times. Insecticide applications were made on August 1, 2003 using a CO<sub>2</sub> backpack sprayer and Teejet Hollow Cone TX-US4 nozzles at 40 PSI. Evaluation of plots were conducted on September 4, 7, 8, 10, 11 and 12. Ten consecutive plants per plot were examined for number of tunnels, tunnel length, live larvae and girdling.

**Results:** Intrepid at 6 oz and 8 oz/a provided the same level of control as the standard pyrethroid Warrior for number of tunnels in the stalk, tunnel length in the stalk and number of live larvae found (Fig 1,2 &3).

**Summary:** Intrepid at the higher rates (6&8 oz/a) was effective in controlling southwestern corn borer infestations compared to the standard Warrior. Intrepid is a soft insecticide which has low impact on beneficial insects; therefore spider mite populations which are often present at the same time as southwestern corn borer are not as prone to reach damaging levels. This could have far reaching implications for management of pesticide resistant spider mites.

Table 1. Evaluation of insecticides for control of 2<sup>nd</sup> generation southwestern corn borer in corn Helms Farm, TAES, Halfway, TX 2003.

Treatment	Rate/A	Number per 10 plants		
		Tunnels	Tunnel Length(cm)	5 <sup>th</sup> Instar Larvae
Untreated	Untreated ----	23.3 a	197 a b	6.5 a
Intrepid	Intrepid 2 oz	22.8 a	241 a	5.8 a
Intrepid	Intrepid 4 oz	21.0 a	186 a b	5.0 a
Intrepid	Intrepid 6 oz	11.0 b	86 c	1.5 b
Intrepid	Intrepid 8 oz	10.5 b	124 b c	2.5 b
Warrior	Warrior 3.8 oz	8.3 b	53 c	0.8 b

ANOVA and DMRT. Any two numbers in a column having a common letter are not significantly different at the 0.05 probability level.

Table 2. Evaluation of insecticides for control of 2<sup>nd</sup> generation southwestern corn borer in corn. Helms Farm, TAES, Halfway, TX 2003.

Treatment	Rate/a	Percent		
		Plants w/damage	Plants w/ larvae	Girdled
Untreated	Untreated 00 oz	90 a	63 a	17.5 a
Intrepid	Intrepid 2 oz	80 a	53 a	5 b
Intrepid	Intrepid 4 oz	88 a	53 a	7.5 b
Intrepid	Intrepid 6 oz	68 a b	20 b	0 b
Intrepid	Intrepid 8 oz	53 b	25 b	2.5 b
Warrior	Warrior 3.8 oz	48 b	7.5 b	2.5 b

ANOVA and DMRT. Any two numbers in a column having a common letter are not significantly different at the 0.05 probability level.