

# YIELD AND GRADE RESPONSE TO INSECTICIDE APPLICATION FOR CONTROL OF LATE-SEASON APHIDS 2002-03

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**Location:** Edisto Research and Education Center, Barnwell Co. SC, Field D-13 C.

**Design:** RCB with five replicates; plot size 8 rows (8" spacing) x 40'

**Soil Type:** Varina loamy sand.

**Rotation:** 2002 strip-till corn; 2001 peanut, fallow; 2000 strip-till corn; 1999 peanut, fallow

**Variety and  
Planting**

**Date:** NK Coker 9835 planted Nov 26, 2002

**Seeding**

**Rate:** 24 seed / row foot

**Herbicide:** 0.30 oz Express 75DF was applied 10 Feb.

**Fungicide:** 6 oz Headline 2 Apr

**Treatments:**

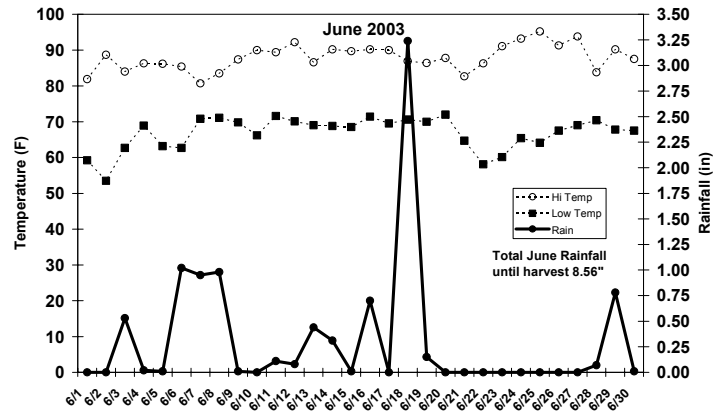
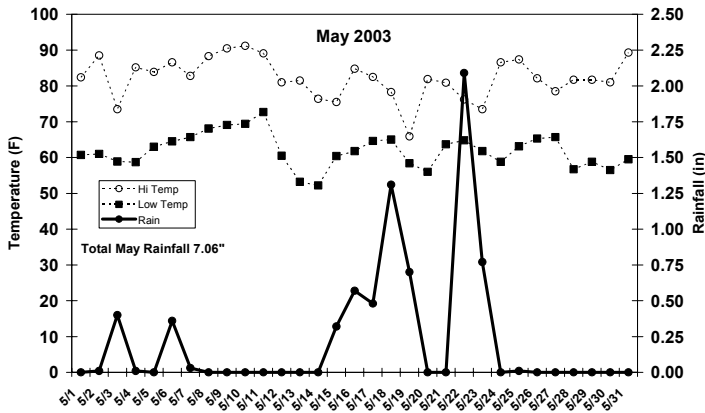
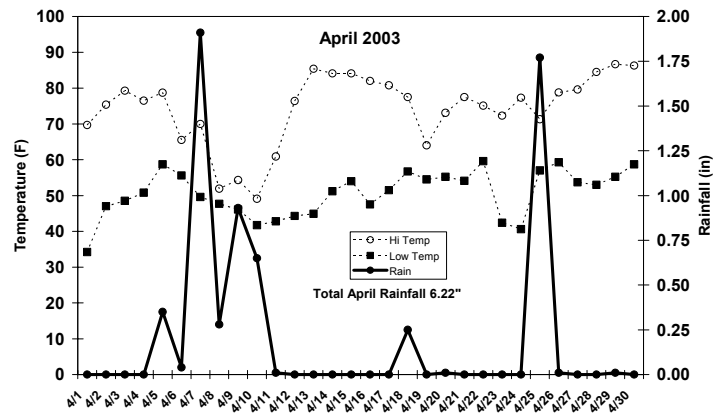
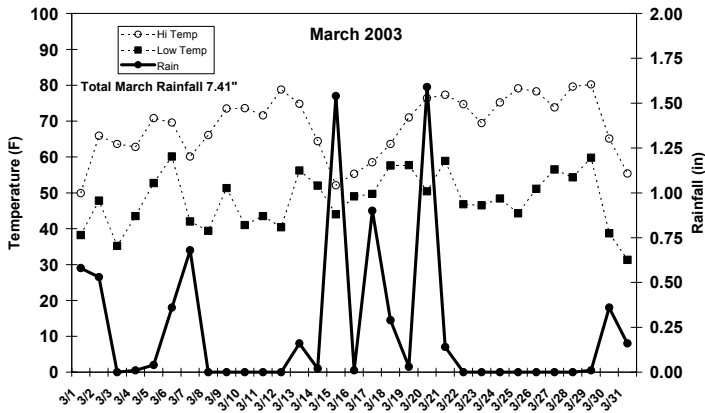
Treatment	Rate	Timing
Untreated	----	----
Warrior T	3.8 oz /acre	4 Apr (GS 39)

**Methods:** Warrior was applied with a tractor-mounted CO<sub>2</sub> pressurized sprayer delivering 5 gpa @ 50 psi through Tee Jet TX 8 hollow cone nozzles. The boom was shielded with Red Ball broadcast hoods to prevent drift. Pre-treatment aphid counts were taken 3 April by examining two 6" sections of row in the untreated check plots. Five heads per plot were examined 17 April. The inner six rows of each 8-row plot were harvested 26 June with an Almaco plot combine. Yield samples were weighed on an electronic balance. Test weight was taken by funneling a sub-sample of grain through a Seedburo No. 151 filling hopper and weighing one dry pint of grain on an electronic scale. Grain moisture content was measured with a Burrows DMC-700 moisture meter. All yields were adjusted to 13.5% moisture before analysis.

**Analysis:** ANOVA, using SAS PROC GLM.  
Fisher's protected LSD was used for mean separation ( $P=0.05$ ).

**Notes:** Weather delayed harvest approximately 3 weeks and significantly reduced yield and test weight.

The following charts are temperature and rainfall recorded for March – June 2003.



**Table 1. Wheat insecticide effects on late-season aphids, yield, and test weight, Blackville, SC 2002-03.**

Treatment	Rate and Timing	BCOA		EGA		Yield (bu/acre)	Test Weight (lbs/bu)
		/ row ft 3 Apr	/ head 17 Apr	/ row ft 3 Apr	/ head 17 Apr		
Warrior T	3.8 oz /ac 3 Apr	---	0	---	0	67.4 a	53.3 a
Untreated Check	---	23.0	0	25.0	0.05	67.1 a	53.3 a
LSD (0.05)	---	---	---	---	---	6.3	0.7

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Coker 9835 planted 26 Nov 2002; harvested 25 June 2003.

Means followed by the same letter are not significantly different, Fisher's protected LSD ( $P=0.05$ ).