

# ON-FARM FEBRUARY-TIMED INSECTICIDE EFFECTS ON CEREAL LEAF BEETLE INJURY IN WHEAT 2003

J. W. CHAPIN AND J. S. THOMAS

DEPARTMENT OF ENTOMOLOGY  
CLEMSON UNIVERSITY

R. DUNCAN, R. CUBBAGE, AND G. HARVEY

CLEMSON UNIVERSITY EXTENSION AGENTS

**Location:** Clarendon, Lee, and Sumter Counties

**Design:** Split plot

**Soil Type:** Various

**Methods:** Aphicide rates of Karate Z were applied to half of six fields (two per county) to pre-jointing wheat in February by the grower. Each test was coordinated and supervised by the county agents. CLB populations and damaged flag leaves were accessed 23 April by two observers each examining five, ten stem samples in both the treated and untreated areas of every field. Eggs, larvae, and number of damaged flag leaves were recorded.

**Analysis:** ANOVA, using SAS PROC GLM.  
Egg and larvae data were transformed using square root ( $x + 0.5$ ), percent damaged flag leaves data were transformed using arcsine( $x$ ).  
Fisher's protected LSD was used for mean separation ( $P=0.05$ ).

**Table 1. Effects of on-farm, aphid-timing February Karate application on 23 April CLB populations and damage.**

County	Field	Variety	Treatment	Eggs / 100 stems	Larvae / 100 stems	% flag leaves damaged
Clarendon	House		Karate	7	2	7
Clarendon	House		Check	7	1	34
Clarendon	Brunson	2684	Karate (12 Feb)	1	0	0
Clarendon	Brunson	2684	Check	1	0	1
Lee	Elmore	26R	Karate (20 Feb)	5	4	9
Lee	Elmore	26R	Check	1	7	13
Lee	Elmore	AGS 2000	Karate (20 Feb)	4	2	3
Lee	Elmore	AGS 2000	Check	0	5	12
Sumter	Brogden		Karate	14	33	56
Sumter	Brogden		Check	4	48	83
Sumter	Bland		Karate	3	5	21
Sumter	Bland		Check	4	16	39
<b>Pooled</b>			<b>Karate</b>	<b>5.7 a</b>	<b>7.7 a</b>	<b>16.0 b</b>
			<b>Check</b>	<b>2.8 a</b>	<b>12.8 a</b>	<b>30.0 a</b>