

## 2007 Cowpea Aphid Insecticide Efficacy Trial, Dickinson Co., Kansas Jeff Whitworth and Aqeel Ahmad, Department of Entomology, Kansas State University

Pest: Crop:	Cowpea Aphid, <i>Aphis craccivora</i> Alfalfa, <i>Medicago sativa</i> , 7 treatments
Location: Planting Date:	Dickinson Co., Kansas
Plot Size:	15 ft, 20 ft
Experimental Design:	Randomized Complete Block; 4 Replications
Date of Application:	Sprayed with hand sprayer delivering 20 gal/acre at 30 psi on August 03, 2007
Evaluation:	4 stems selected at random from each plot, vigorously shaken into 1 gal white container and aphids counted. Evaluated on August 05 (2DAT), August 11 (8DAT), August 19 (16DAT); DAT, days after treatment.
Special Notes:	Pretreatment counts conducted on August 01, 2007 by counting all aphids/stem, after vigorously shaking in 1 gal. white container, from 10 randomly selected stems. Total= 278 aphids (27.8 aphids/stem); Alfalfa ca. 8-10" tall. Aphid populations declined naturally in untreated by August 19, probably due to many beneficials present which include lady beetles, lacewings, and a few mummies.
Phytotoxicity:	None noted

No.		Total number cowpea aphid/4 stems		
	Treatment	August 05 (2 DAT)	August 11 (8 DAT)	August 19 (16 DAT)
1	Untreated	$177.0 \pm 12.8 \text{ a}$	$81.8 \pm 3.2$ a	11.0 ± 2.9 a
2	Baythroid XL @ 2.0 fl. oz./acre	$1.0\pm1.0\;b$	$0.0\pm0.0\ b$	$0.0\pm0.0\;b$
3	Baythroid XL @ 2.4 fl. oz./acre	$0.0\pm0.0\;b$	$0.0\pm0.0~\text{b}$	$0.0\pm0.0\ b$
4	Warrior (with zeon technology) @ 2.56 fl. oz./acre	$0.5\pm0.5\;b$	$0.0\pm0.0\;b$	$0.0\pm0.0\ b$
5	Warrior (with zeon technology) @ 3.86 fl. oz./acre	$0.3\pm0.3~\text{b}$	$0.0\pm0.0\;b$	$0.0\pm0.0\ b$
6	Mustang Max @ 3.0 fl. oz./acre	$2.0\pm2.0\ b$	$2.5\pm1.9~\text{b}$	$0.0\pm0.0\;b$
7	Baythroid XL @ 1.2 fl. oz./acre	$0.8\pm0.8\;b$	$2.5\pm1.5~\text{b}$	$0.0\pm0.0\;b$

Means within a column followed by the same letter are not significantly different (P > 0.05; PROC GLM; Mean comparison by LSD [SAS Institute 2003]).

Reference to specific products is provided solely for informational purposes. Experiments with pesticides on non-labeled crops or pests is part of the insecticide registration process, it does not imply endorsement or recommendation of non-labeled uses of pesticides by Kansas State University. All pesticide use must be consistent with current labels.

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