



2013 Alfalfa Weevil Insecticide Efficacy Trial –
Dickinson Co., KS.

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Pest: Alfalfa weevil, *Hypera postica*

Crop: Alfalfa; Established stand – 6 years

Location: Dickinson Co., KS

Planting Date: N/A

Plot Size: 10 ft. x 20 ft.

Experimental Design: Randomized Complete Block; 4 Replications

Information: Sprayed with hand sprayer delivering 20 gal/acre at ca.30 psi on 21 April, 2013.

Phytotoxicity: None noted

Evaluation: 10 stems/treatment / replication randomly selected, shaken into 1 gal. white container and counted on 25 April (4 DAT), 28 April (7 DAT), 6 May (15 DAT), and 12 May (21 DAT)
DAT = Days After Treatment

Special Notes: Pre-treatment counts conducted on 21 April, 2013. Average of 9 larvae/ 10 stems (0.9 larva/stem).
Treatments # 6 and 25, 2nd application made on 5 May, 2013
Treatment # 28, 1st application made on 5 May, 2013

Weather at Time of Treatment: 21 April - 70°F ; 5 May - 64°F

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Treatment Date: 21 April, 2013

| No. | Treatment/Product Name | Alfalfa weevil larvae / 10 stems (Mean ± SE) | | | |
|-----|---|--|---------------------|-------------------|--------------------|
| | | 25 April (4 DAT) | 28 April (7 DAT) | 6 May (15 DAT) | 12 May (21 DAT) |
| 1 | Untreated | 6.8 ± 0.8a | 8.0 ± 1.5a | 2.5 ± 0.6a | 2.5 ± 1.2a |
| 2 | Fastac 100 SC @ 3.8 fl oz/a + 25% surfactant | 1.0 ± 0.4de | 1.8 ± 1.4bcd | 0.3 ± 0.3cd | 0.8 ± 0.6bc |
| 3 | Fastac 100 SC @ 3.8 fl oz + Lorsban @ 16 fl oz/a + 25% surfactant | 1.5 ± 0.3cde | 0.5 ± 0.5cd | 0.0 ± 0.0d | 0.8 ± 0.5bc |
| 4 | Baythroid XL @ 2.8 fl oz/a | 1.8 ± 0.8cde | 0.5 ± 0.5cd | 0.5 ± 0.3bcd | 0.8 ± 0.5bc |
| 5 | Baythroid XL @ 2.8 fl oz/a + Lorsban 480EC @ 1 pt/a | 2.8 ± 1.3bcd | 1.0 ± 0.6bcd | 0.5 ± 0.3bcd | 0.5 ± 0.5bc |
| 6 | Baythroid XL @ 2.8 fl oz/a + Lorsban 480EC @ 1 pt/a (1st application) and Baythroid XL @ 2.8 fl oz/a + Dimethoate @ 1 pt/a | 1.3 ± 0.5cde | 2.3 ± 1.0bcd | 0.0 ± 0.0d | 0.8 ± 0.5bc |
| 7 | Lannate LV @ 1.5 pts/a | 1.8 ± 0.6cde | 1.0 ± 0.6bcd | 1.5 ± 0.6abc | 0.8 ± 0.5bc |
| 8 | Steward @ 5.3 fl oz/a + 6 fl oz/a organosilicone surfactant | 0.8 ± 0.5de | 1.0 ± 0.4bcd | 1.5 ± 0.9abc | 1.5 ± 1.0ab |
| 9 | Steward @ 6.0 fl oz/a + 6 fl oz/a organosilicone surfactant | 1.3 ± 0.8cde | 1.8 ± 0.9bcd | 0.8 ± 0.5bcd | 0.5 ± 0.5bc |
| 10 | Prevathon @ 14 fl oz/a + 6 fl oz/a organosilicone surfactant | 4.3 ± 1.3b | 2.3 ± 1.3bcd | 0.8 ± 0.8bcd | 0.5 ± 0.3bc |
| 11 | Lambda-cyhalothrin + sulfoxafloer @ 2.0 fl oz/a | 2.3 ± 1.4bcde | 0.8 ± 0.5cd | 0.3 ± 0.3cd | 1.0 ± 1.0bc |
| 12 | Lambda-cyhalothrin + sulfoxafloer @ 2.5 fl oz | 1.8 ± 0.8cde | 3.5 ± 1.2b | 1.8 ± 0.5ab | 0.3 ± 0.3bc |
| 13 | Lambda-cyhalothrin + sulfoxafloer @ 3.0 fl oz/a | 1.8 ± 0.9cde | 1.8 ± 0.9bcd | 0.5 ± 0.3bcd | 0.3 ± 0.3bc |
| 15 | Chlorpyrifos + Lambda-cyhalothrin @ 20 fl oz/a | 2.3 ± 1.0bcde | 2.3 ± 1.0bcd | 1.5 ± 1.5abc | 0.8 ± 0.8bc |

| | | | | | |
|----|---|---------------|--------------|--------------|--------------------|
| 16 | Warrior II @ 1.63 fl oz/a | 1.5 ± 0.3cde | 1.8 ± 1.1bcd | 0.3 ± 0.3cd | 0.3 ± 0.3bc |
| 17 | Endigo ZCX 2.71 ZC @ 4 fl oz/a | 1.8 ± 0.9cde | 1.0 ± 0.7bcd | 0.5 ± 0.3bcd | 0.0 ± 0.0c |
| 18 | Besiege 1.25 ZC @ 9 fl oz/a | 1.3 ± 0.5cde | 1.0 ± 0.7bcd | 0.3 ± 0.3cd | 1.0 ± 0.0bc |
| 19 | Cobalt Advance 2.63 EC @ 24 fl oz/a | 0.3 ± 0.3e | 0.5 ± 0.3cd | 0.0 ± 0.0d | 0.0 ± 0.0c |
| 20 | Warrior II w/ Zeon 2.08 CS @ 1.92 fl oz/a | 1.0 ± 0.4de | 2.0 ± 1.4bcd | 0.0 ± 0.0d | 0.3 ± 0.3bc |
| 21 | Stallion 3.025 EC @ 11.75 fl oz | 1.5 ± 0.6cde | 1.3 ± 0.5bcd | 0.0 ± 0.0d | 0.5 ± 0.3bc |
| 22 | Stallion 3.025 EC @ 11.75 fl oz + Lorsban @ 8 oz | 1.8 ± 0.8cde | 0.5 ± 0.3cd | 0.3 ± 0.3cd | 0.3 ± 0.3bc |
| 23 | Mustang Maxx @ 4 oz/a + Steward @ 4 oz/a | 1.3 ± 0.6cde | 3.0 ± 1.1bc | 1.0 ± 0.4bcd | 1.0 ± 0.4bc |
| 24 | Stallion @ 11.75/a oz + Steward @ 4 oz/a | 2.3 ± 0.9bcde | 1.8 ± 0.6bcd | 1.5 ± 0.9abc | 0.3 ± 0.3bc |
| 25 | Stallion @ 11.75 oz/a and Mustang Maxx @ 4 fl oz/a 10-14 days later | 3.3 ± 0.9bc | 2.3 ± 1.3bcd | 0.8 ± 0.8bcd | 0.8 ± 0.8bc |
| 26 | Mustang Maxx @ 4 fl oz/a | 1.8 ± 1.0cde | 1.8 ± 0.8bcd | 0.0 ± 0.0d | 0.8 ± 0.5bc |
| 27 | Cobalt Advance @ 19 fl oz/a | 1.0 ± 0.4de | 0.3 ± 0.3d | 0.0 ± 0.0d | 0.0 ± 0.0c |
| 28 | Prevathon @ 20 fl oz/a | - | - | - | 1.0 ± 0.4bc (7DAT) |

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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