

Section I.
Forage Insects

**EVALUATION OF FOLIAR INSECTICIDES ON PEST AND BENEFICIAL
INSECTS IN ALFALFA PARMA, IDAHO 1994**

Craig R. Baird
University of Idaho
Parma Research & Extension Center
Parma, Idaho 83660
(208) 722-6701

Foliar sprays were applied to 5-year old "Mohawk" alfalfa on 17 June 1994 using a CO₂ backpack sprayer with flat fan nozzles which delivered 50 gallons of water per acre. Replicates were .01 acre (21 ft x 21 ft) arranged in a randomized complete block design with sixteen treatments including untreated check. Five-sweep samples (90° straight sweep) were placed in plastic bags, frozen and evaluated in the laboratory.

RESULTS

LYGUS ADULTS: All treatments provided significant control for 4 to 6 days; however after the 7-day counts only Karate and Mustang, EXP 60720 (.012 and .025) and Admire (.75) were significantly better than Untreated Check. Continuous fly-in of adult Lygus from adjoining alfalfa prevented useful evaluation beyond 7 days although most products showed reduced numbers and in some cases significantly reduced numbers.

LYGUS NYMPHS: All treatments gave significant control of Lygus nymphs for at least 20 days. After 28 days, Admire (.75), Dibrom (1.5), Pirimor (3 oz) and Furadan still had significantly better control than Untreated Check.

PEA APHIDS: All treatments showed significant reduction after 1 day evaluation. From 4 to 7 day evaluations Pirimor, Karate (.04), Mustang (.05), Admire (.5 & .75 oz), Capture, Dibrom (1.5), and Furadan demonstrated the most significant control. After 28 days, Pirimor, Karate, Mustang, Admire, Capture, and Dibrom still had significant control compared to Untreated Check.

ALFALFA WEEVIL: All pyrethroids and Furadan showed immediate reduction and total control of alfalfa weevil after 1 day counts. EXP 60720 (.012, .019, and .025) and Admire (.5 and .75 oz) also demonstrated complete control by the 4 day counts and continued to have excellent control for the duration of the test. Dibrom and Pirimor did not have significant control over the Untreated Check. Furadan also showed significant control compared to UTC.

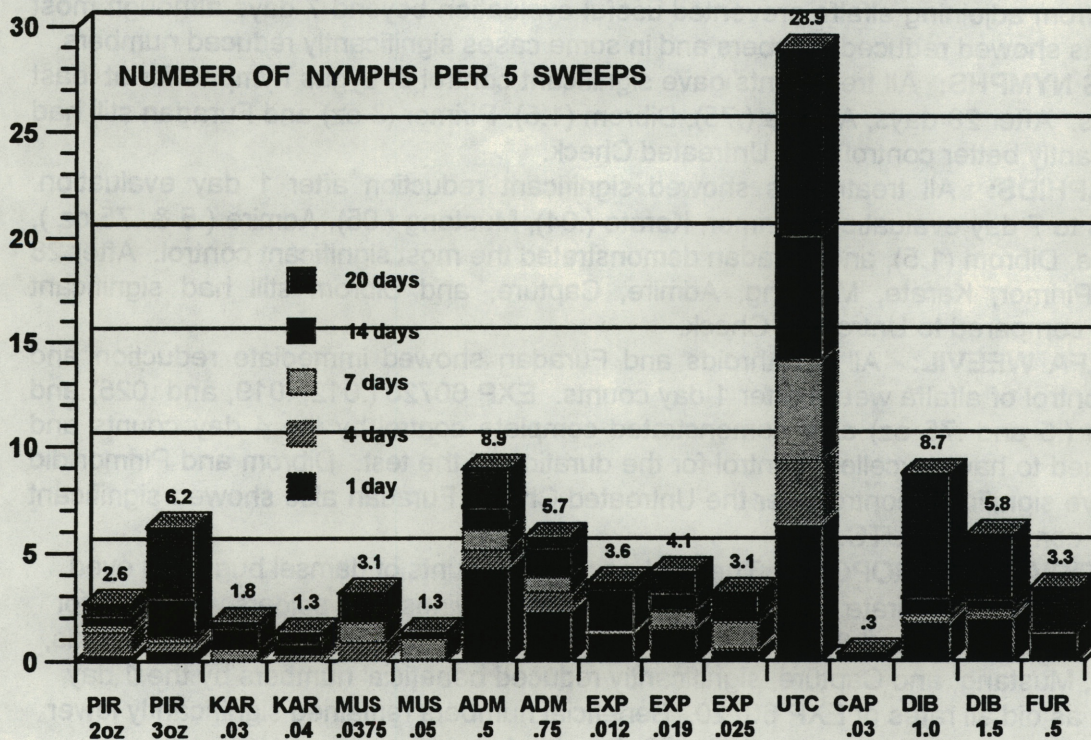
BENEFICIAL ARTHROPODS: The total aggregate counts of damsel bugs, big eyed bugs, lady beetles, pirate bugs, parasitic wasps, lace wings, and spiders was used for evaluating the effects of these insecticides on beneficial populations. The pyrethroids, Karate, Mustang, and Capture, significantly reduced beneficial numbers by the 1 day counts as did all rates of EXP 60720. Beneficial numbers remained significantly lower in these same treatments through the 20 day counts.

LIST OF TREATMENTS:

<u>Treatment:</u>	<u>Rate (ai/A)</u>
1. Pirimor 50W	2 oz
2. Pirimor 50W	3 oz
3. Karate 1E	.03 lb
4. Karate 1E	.04 lb
5. Mustang 1.5	.0375
6. Mustang 1.5	.05
7. Admire 240FS	.5 oz
8. Admire 240FS	.75 oz
9. EXP 60720 80WG	.012 lb
10. EXP 60720 80WG	.019 lb
11. EXP 60720 80WG	.025 lb
12. Untreated Check	-----
13. Capture 2E	.03 lb.
14. Dibrom 8E	1.0 lb
15. Dibrom 8E	1.5 lb
16. Furadan 4F	.5 lb

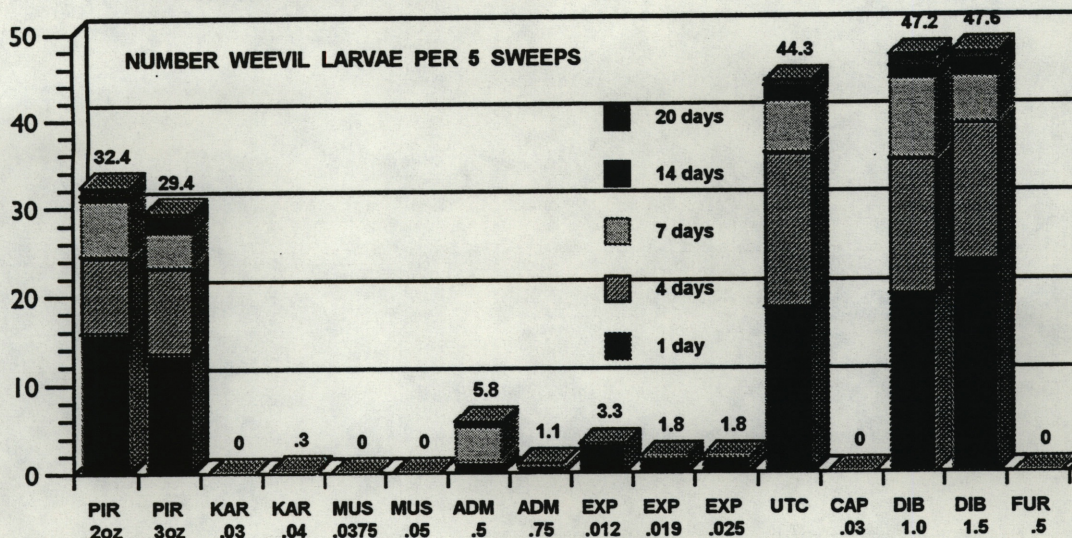
LYGUS NYMPH CONTROL ON ALFALFA

Parma, Idaho 1994



ALFALFA WEEVIL CONTROL

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EFFECT OF INSECTICIDES ON BENEFICIALS

Parma, Idaho 1994 (DB,BE,LB,LW,PB,S)

