Medicago sativa
L.
ALFALFA:
Mavrick 2 F
160 INSECTICIDE & ACARICIDE TESTS, VOL. 15 F: FIELD AND CEREAL CROPS

Twostriped grasshopper; Melanoplus bivittatus (Say)
Differential grasshopper; Melanoplus differentialis (Thomas)
Redlegged grasshopper; Melanoplus femurrubrum (De Geer)

RESIDUAL CONTROL USING REDUCED INSECTICIDE RATES FOR MELANOPSIS SPP. IN ALFALFA, 1989:
Plots (63.7 by 63.7 m; 0.4 ha) were established (16 Aug) with an untreated check, Asana and 3 rates of XLR Sevin arranged in checkerboard fashion, which allowed grasshopper immigration into treated plots from all 4 directions. Applications were made with a Broyhill sprayer delivering 10 gal/acre at 40 psi using Teejet 8002 nozzles. A randomized complete block design was used with 4 replications. Forty rings (0.1 m²) were placed in 4 parallel rows in the central portion of each plot. Grasshopper counts (0, 5, 12, 16 and 30 d postapplication) were subjected to Abbott’s formula which weights the percent reduction accounting for decreases in grasshopper numbers in a column followed by the same letter are not significantly different (P = 0.05; DMRT).

Means in columns followed by the same letter are not significantly different (P = 0.05; DMRT).

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POTATO LEAFHOPPER CONTROL, 1989: Two tests were conducted on the Pennsylvania Agriculture Experiment Station farm at Rock Springs. Experiment A was conducted on the second alfalfa cutting and Experiment B was conducted on the third alfalfa cutting. Forty ft by 40 ft plots were arranged in a randomized complete block design with an untreated check in each of the 4 replications. In Experiment A potato leafhopper densities were estimated from 20 pendulum sweeps taken randomly across each plot with a 15 inch diam insect beating net on 29 Jun. All treatments were applied as foliar spray on 30 Jun. Thereafter, leafhopper densities were sampled on 3, 6, 14, 20, 26 Jul, or 3, 6, 14, 20 and 26 days post spray. Alfalfa height at time of spraying was 4–6 inches. Sprays were applied in 20 gal of water per acre at 26 psi with a tractor-mounted sprayer equipped with a 20 ft boom with 80 degree flat fan nozzles and 50 mesh screens. Alfalfa yield was determined from a 60 ft² swath collected from each plot on 27 Jul. Treatments in experiment B were similarly applied. Leafhopper density was evaluated on 9 Aug before foliar spray was applied on 10 Aug. Sweep samples for leafhoppers were taken on 14, 17, 24, 31 Aug and 7 Sept, or 4, 7, 14, 21, and 28 days post spray. Alfalfa yield was determined from a 60 ft² swath collected from each plot on 13 Sep.