Granulated Insecticides Superior to Sprays for ALFALFA WEEVIL CONTROL

V. E. BURTON
C. S. KOEHLER
R. E. FLEMING

Field trials in Lassen County demonstrated that granulated heptachlor was more effective against the alfalfa weevil than comparable dosages of heptachlor used as a spray. Applications in the dormant season, or as growth begins in the spring, are believed to kill the adult weevils before eggs are laid.

Heptachlor granules applied in the spring at the rate of one-quarter pound of active material per acre reduced larval numbers 93%. Sprays applied in the spring at the same dosage gave 83% control. The use of higher dosages (one-half pound active heptachlor per acre) in the fall resulted in 92% control with granulated material and 86% control with sprays. One pound per acre dosages of heptachlor in the fall resulted in a 96% reduction of larvae with granulated material and a 91% reduction with sprays. Telodrin, an experimental spray applied in the spring at 2 ounces of active material per acre, reduced larval numbers 96%.

Results

These results show a consistent advantage for granulated heptachlor over the spray material. The more effective control with granules is believed to be the result of the greater persistence of that formulation.

Further experimental trials are underway in several sections of northern California to obtain additional information on the effectiveness of heptachlor and other compounds. Dosage rates and dates of application are being tested to determine a combination resulting in the most effective and economical control of the alfalfa weevil. Insecticidal treatments timed to kill the overwintering adults before eggs are laid may also aid the survival of important beneficial species of insects.

Vernon E. Burton is Extension Entomologist, University of California, Davis; C. S. Koehler is Assistant Entomologist, U.C., Berkeley, and Richard E. Fleming was Farm Advisor, Lassen County (now in Tulare County).