

PEST MANAGEMENT IN ALFALFA HAY PRODUCTION
A FARM ADVISOR'S EVALUATION

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Insect pest management in alfalfa as practiced by pest control advisors and growers differs considerably today from what it was when the price of alfalfa hay was \$30-35 per ton. Increased value of the crop and higher cost of production to the grower have had both good and bad effects on pest management practices. The higher value of hay in 1971-1973 initially led to overtreatment of certain alfalfa pests, most notably the Egyptian Alfalfa Weevil (EAW). This was not the fault of any one group in the alfalfa industry. Growers were not willing to lose yield and quality to insect pests; research information on the EAW was not available; and fieldmen were treating fields without a real understanding of the insect and its control. Since that time the inputs of the University research, the pest control advisor, and the grower's experience have resulted in better use of pest management principles in the control of the EAW. There are still and will continue to be occasional misuse of insecticide treatments (i.e. treating with an insecticide at less than economically damaging levels or delaying treatments until after economic damage has already occurred).

The blue alfalfa aphid (BAA) represents a new insect confronting the alfalfa industry. In the spring of 1976 populations tended to build to economically damaging levels before fieldmen and growers recognized the presence of the problem. As a result, chemical treatments were sometimes applied too late to already damaged crops. Some growers, in anticipation of a BAA buildup, applied treatments unnecessarily. Developing proper management decisions of this pest will follow a pattern similar to that of the EAW.

Pest management in alfalfa hay production should not be limited to the management of insects as the EAW and the BAA, but should include all pests. Diseases, nematodes, and weeds are important pests to consider in the overall health and production of the alfalfa plant. Management of pests requires the utilization of chemical control, biological control, cultural practices, varietal resistance, and other methods. No one method is sufficient. This type of approach requires research, education, and finally, field application. In the San Joaquin Valley, pest control consultants and advisors, farm advisors, and growers are today only just beginning to understand and bring all these aspects together in a total management program.

Alfalfa is unique in that it is harvested many times over a three to four year period. As a result the pest management decisions made during any one harvest may affect subsequent harvests for that season and possibly extend for the life of the stand. The effect can be on yield, insect populations (both beneficial and harmful), disease occurrence, weed populations, stand persistence and other factors. Pest management concepts in alfalfa must be centered around the health and production of the alfalfa plant. Good cultural practices may be more beneficial to the total pest management program than any other control measure.

Pest management in alfalfa hay production involves total decision making, utilizing the experience of the researcher, pest control consultant and advisor, farm advisor, grower and many others. Insect management is only one aspect of such a program. The reality of having a workable pest management philosophy in alfalfa hay production is still in the future.