



Fresno County

Seed Crop Notes

University of California Cooperative Extension

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RESEARCH UPDATES

Research projects funded by grower and conditioner participation in the California Alfalfa Seed Production Research Board provide valuable information to the seed industry each year. Research efforts in the subject areas of weed control and desiccation, pollination, and cultural practices were funded during the 1991 production season. Annual summaries submitted by the project leaders are printed in this newsletter to bring you up-to-date on progress made during the year. If there are any production concerns which you would like to see addressed in the future, contact me and I will try to identify a researcher to submit a proposal.

Vegetation Management and Desiccation Studies in Alfalfa Seed Production

Project Leader: Bill B. Fischer, Farm Advisor
Cooperators: Dr. Shannon Mueller and Kurt J. Hembree

Three trials were conducted during 1991 to further evaluate the effectiveness of 2,4-DB amine plus an adjuvant for the control of broadleaved weeds in newly planted alfalfa. MON-13288-0.5g (an experimental compound) was evaluated at 3 rates (0.5, 1.0 and 2.0 lbai/a) to study its selectivity on newly established alfalfa and its effectiveness in controlling emerged weeds. Pursuit, Velpar, Kerb and Buctril were also evaluated alone and in combinations.

The effectiveness of a 15% formulation of Treflan granular was compared with the presently used 10% Treflan TR-10 formulation for parasitic dodder control.

In a desiccation trial the evaluation of Ignite was continued. Also, the effectiveness of diquat and paraquat was compared. Two formulations of endothall were evaluated.

Results:

2,4-DB amine (Butyrac 200) in combination with an adjuvant (X-77) provided comparably effective control of certain broadleaved weeds that was obtained with 2,4-DB ester (an herbicide no longer available.)

MON-13288-0.5g applied on alfalfa in the 2 to 4 trifoliolate leaf stage retarded the growth of the alfalfa at all rates (0.5, 1.0 and 2.0 lbai/a) used. At 1.0 and 2.0 lbai/a rates it caused a significant reduction in yield at the first cutting nearly four months after treatment. This new experimental herbicide failed to control pineapple weed and some other weeds in the sunflower (thistle) family.

Pursuit (imazethapir) and Kerb (pronamide) exhibited good selectivity, however Kerb failed to control all weeds in the sunflower family and Pursuit did not control cudweed.

Treflan TR-15 (trifluralin 15% granular) controlled dodder as effectively as Treflan TR-10 (trifluralin 10% granular) applied at the same rates (2.0 lbai/a) of active ingredient per acre in a newly planted alfalfa field grown for hay. Some plots were treated once and others two times, each time 2.0 lbai/a was applied with fixed wing airplanes.

Ignite (glufosinate) continued to provide effective desiccation and it was more effective in delaying regrowth than the other desiccants used. Diquat and paraquat provided comparably effective desiccation when applied two times at 4 day intervals. Des-I-Cate (mono (N,N - dimethylalkylamine) salt of endothall) was more effective than Hydrothol (mono (N,N - dimethylamine) salt of endothall) applied at comparable rates with More-Act, an adjuvant.

A more detailed report is being prepared for submission to the Alfalfa Seed Production Research Board.