

Use Right Chemical, Right Methods for Weed Control In Lettuce

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Because of increasing labor costs, chemical weed control continues to interest commercial growers of lettuce. However, certain problems, especially those caused by abnormal climatic conditions, make it difficult to determine the value of such a practice.

Recent studies using CDEC* for control of purslane in head lettuce give us a better understanding of plant reactions to this material in commercial fields.

In these studies, the three-pound-per-acre rate of application appeared most nearly ideal. This rate is based on an overall application to a bed 24 inches wide. Although total gallonage per acre may vary widely, the 30- to 40-gallon rate appears most desirable. Smaller quantities are difficult to apply uniformly, while larger amounts increase costs and are more difficult to transport through the field during application.

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*2-chloroallyl diethyldithiocarbamate (CDEC) is available commercially as Vegadex.

Beef Eating Quality

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two factors is low, about 15 to 20 per cent.

Live animal scores at weaning, in the feedlot, or at slaughter tell us nothing about the carcass except for fat. Apparently an experienced judge can fairly accurately estimate fat on a steer but he is not able to accurately estimate rib eye area or marbling.

Since inheritance plays a major role in the final carcass characteristics, it would certainly seem most worthwhile if the cattle producer would check on his steers when they go to the packing house.

Carcass Tells the Story

Obviously, this will not always be easy, but it would be worth considerable effort. If the rancher could actually follow his steers from the feedlot to the rail he could fairly compare his steers with others and see if the animals he produces have obvious faults or exceptional merit.

In this competitive age, we cannot afford to let our whims and fancies interfere with the job of producing only a top quality product for the consumer.

Band Application Does Well

To reduce costs of material, a band-treating application procedure has proven satisfactory. For example, rates can be reduced a third by spraying the material in two 8-inch bands, one directly over each of the seed rows in the bed. This leaves the center 8 inches of bed untreated.

The maximum reduction through the use of banding appears to be about 50 per cent. This reduction would mean two 6-inch bands per bed treated. Bands narrower than 6 inches have not proven satisfactory. In the banding procedure, weeds in the center unsprayed area must be controlled through cultivation. Thus CDEC is used as a supplement to proper cultivation.

Must Judge Carefully

Best procedure for band application is to mount the tank and spraying equipment on the rear of the lettuce planting sled. Then the application can be made at planting time and can be regulated precisely. In any banding application it is important that the area sprayed is exactly proportionate to the amount of herbicide used. If the total bed coverage is 24 inches the two 8-inch bands would reduce the area and amount of spray material by one-third, so the amount used would then be 2 pounds of CDEC in 20 to 26 gallons of water per acre.

CDEC not only gives excellent purslane control, but it is also relatively effective in controlling Careless weeds (*Amaranthus* sp.). On several occasions, water grass, a serious weed in early fall-planted lettuce, has been effectively controlled. However, CDEC is not recommended primarily for control of water grass in lettuce fields. Any grass control is an additional benefit under certain conditions when CDEC is used to control other weeds.

Irrigate After CDEC Spray

Two important cultural procedures that have a direct influence on the effectiveness of this herbicide are (1) condition of the planting bed surface and (2) the timing of the first irrigation after planting and spray application. For best results, the bed surface should be free of large clods and generally smooth. The surface soil should not be made powder fine because such a soil condition interferes with water intake, seed germination and seedling growth.

The field should be irrigated as soon after the herbicide is applied as is feasible. The longer the delay between the herbicide application and the germina-

tion irrigation, the more adversely affected are the lettuce plants, reducing the stand, and retarding growth of lettuce seedlings. On CDEC-sprayed fields, it is important to keep irrigation water as low in the furrow as possible. Weeds will not be controlled where the sprayed surface is covered with water.

Rain, even in quantities as small as .10 of an inch, may create conditions that will cause a noticeable reduction in germination, emergence and early seedling growth of lettuce. Fortunately this type of stunting generally is temporary, and the final yield and head size are not affected adversely. Only in rare cases does this reduction in germination and growth become serious enough to require replanting.

Crusting, abnormally hot temperatures during the germination period, or excessive watering create a more serious problem than does the retardation caused by the herbicide. Growers should carefully assess the causes of poor stands before placing the blame and deciding whether replanting is necessary.



Cochise County

Mon. and

Wed., 6:55 a.m.—KAWT, Douglas

Sat., 12:15 p.m.—KAPR, Douglas

Coconino County

Tues., 8:10 a.m.—KCLS, Flagstaff

Graham County

Sat., 9:00 a.m.—KGLU, Safford

Maricopa County

Mon. thru Sat., 5:55 a.m.—

KRUX, Phoenix

Thurs., 12:45 p.m.—KTAR, Phoenix

Sun., 8:45 a.m.—KOY, Phoenix

Pinal County

Mon. thru Fri., 6:45 a.m. & 9:20 a.m.

Also Sun., 8:30 a.m.—

KCKY, Coolidge-Casa Grande

Mon. thru Fri., 6:55 a.m. & 9:30 a.m.

Also Sat., 12:30 p.m.—

KPIN, Casa Grande

Yavapai County

Mon., Wed., and Fri.,

6:10 p.m.—KYCA, Prescott

Mon., Wed., and Fri.,

6:45 a.m.—KNOT, Prescott

Yuma County

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KYUM, Yuma

Mon., 11:30 a.m.—

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