

RECOMMENDED CHEMICALS FOR WEED AND BRUSH CONTROL

Prepared By

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The control of weeds and brush is essential for the economical production of crops. The high cost and decreasing availability of labor make it necessary to fit the use of herbicides into the production practices already in use on many crops.

This publication is a summary of the latest recommendations for the use of herbicides in Arkansas and conforms with federal and state regulations. Supplemental leaflets giving more detailed information on herbicide usage for specific crops are listed in this book. For some crops, new herbicides or practices are suggested for trial usage on limited acreages and are not listed in this publication. Further information on these materials can be obtained from the county Extension agent. A herbicide should be tried on a limited acreage until one is experienced with it. Because of volatility and drift hazards to sensitive crops, 2,4-D related compounds must be applied according to Arkansas State Plant Board and regulations listed in Revised Circular No. 9A, *Arkansas Regulations on 2,4-D, 2,4-DB, MCPA and Other State Restricted Use Herbicides*, which is available from P.O. Box 1069, Little Rock, Arkansas 72203, or from the county Extension agent. It is important that the user of a herbicide **carefully read and follow the label directions and precautions** on the container. See label on grazing restrictions.

NOTE:

Herbicide rates recommended are all on a broadcast basis unless specified. When a herbicide is applied as a band over the row, reduce the rate of material accordingly.

$$\text{i.e. } \frac{\text{Band width}}{\text{Row width}} \times \text{Broadcast rate} = \text{Band rate}$$

For example, where the material is applied in 19" bands on 38" rows, the rate of material should be decreased to $\frac{19}{38}$ or $\frac{1}{2}$ of the amount suggested for broadcast spray. Refer to herbicide application section for specific examples.

Conversion Table

1 tablespoon = 3 teaspoons (0.5 oz)
1 oz = 2 tablespoons
1 cup ($\frac{1}{2}$ pint) = 16 tablespoons (8 oz)
1 pint (2 cups) = 32 tablespoons (16 oz or 1 lb) (473 ml)
1 gallon (16 cups) = 8 pints or 4 quarts (8.4 lb water)
1 cu ft = 7.48 gal (62.4 lb)
1 acre = 43,560 sq ft
1 ppm = 3.6 oz/A inch = 0.0038 grams/gal
1 cfs = 450 gal/min
1 mph = 88 ft/min

$$\text{Acres} = \frac{\text{Length (ft)} \times \text{width (ft)}}{43,560}$$

$$\text{Number of Rows/A} = \frac{43,560}{\text{Row width (ft)} \times \text{row length (ft)}}$$

Trial or Limited Use

Certain new herbicides are suggested to be used on a limited acreage. An individual producer will determine the extent of his usage of these materials. This type of suggestion is included for those materials which have shown promise but have not yet received broad scale field evaluation. Those recommended for trial use are shaded as this is.

Rating Tables

The rating tables preceding the recommendations for each crop give the performance the University of Arkansas Research and Extension personnel expect under optimum conditions, which include such factors as proper incorporation, adequate moisture for activation, proper timing, spray coverage for postemergence herbicides, etc.

Since many factors may cause a herbicide to vary in performance, the University of Arkansas in no way guarantees these estimates. In addition, a high rating on a weed that is not listed on a herbicide label does not constitute a recommendation for that particular herbicide on that particular weed. Rating scale is 0-10, where 10 equals excellent control and 0 equals no control. A "-" indicates no data.

Herbicide Spray Additives

The addition of a surfactant to a postemergence herbicide spray mixture in many cases increases its effectiveness. Where a surfactant is called for, use the herbicide manufacturer's label recommendations.