



Redeem[®] Leaf Spray for Mesquite Control

Wittenburg Ranch 2002

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Summary:

The most effective individual plant leaf spray for mesquite is a herbicide mixture containing ½ % Remedy[®] plus ½ % Reclaim[®] (also called the Brush Busters leaf spray). These two herbicides are purchased separately and combined in the spray tank to obtain the proper mixture and concentration. There is a "pre-mix" of these two herbicides marketed by Dow AgroSciences under the trade name Redeem[®]. Normally used as a weed control herbicide, this product has some potential as a leaf spray herbicide for mesquite, especially if Remedy[®] or Reclaim[®] were no longer available in their present formulations.

To evaluate the effectiveness of Redeem[®] for mesquite control when applied as a leaf spray, trials were established in Brown, Coleman, Lampasas, Mills and Shackelford counties during the summer of 2003. Each trial included 1%, 2% and 3% concentrations of Redeem[®] as compared to the recommended ½ % Reclaim[®] plus ½ % Remedy[®] mixture.

Results from this demonstration will not be available until 2003.

Mesquite is a major noxious plant across most Texas rangelands. One of the most effective control methods is an individual plant leaf spray using a mixture of the herbicides Reclaim[®] and Remedy[®]. The recommended concentration is ½ % each, mixed with water, with the addition of surfactant (¼ %) and dye (¼ % to ½ %). The active ingredient in Reclaim[®] is "clopyralid" and the active ingredient in Remedy[®] is "triclopyr."

Redeem is a herbicide marketed by Dow AgroSciences primarily for weed control. This herbicide contains a mixture of the same active ingredients included in Remedy[®] and Reclaim[®]. As such, this herbicide does have potential when used as a leaf spray for control of mesquite. Unfortunately the ratio of triclopyr to clopyralid is not the same as when a mixture containing ½ % Reclaim[®] plus ½ % Remedy[®] is used. For comparison, a 2% concentration of Redeem[®] contains about the same amount of triclopyr and only ½ the amount of clopyralid as the standard Reclaim[®] plus Remedy[®] mixture. The lesser quantity of clopyralid is expected to reduce

control, but it is unknown how much.

The herbicide Redeem[®] would be an important substitute if either Remedy[®] or Reclaim[®] were no longer available for the Texas rangeland mesquite control market.

Objective:

The objective of these trials is to compare Redeem[®] to the Brush Busters leaf spray (½ % Reclaim[®] plus ½ % Remedy[®]) for control of mesquite.

Materials and Methods:

A total of 5 sites were included in these herbicide trials. Table 1 lists the location and date of application for each. Every site included the same treatments, those being 1%, 2% and 3% concentrations of Redeem[®] applied as a leaf spray to mesquite, and the recommended ½ % Remedy[®] plus ½ % Reclaim[®] mixture applied in same manner.

All treatments were applied using a 4-wheel ATV sprayer, equipped with 10 gal tanks and a 1.4 gpm Shurflo[®] pump. Hand wands were tipped with X-8 adjustable cone nozzles. Herbicides were mixed with water. A non-ionic surfactant and Hi-Light Blue Dye[®] were added to the spray mixture at a concentration of ¼ % each. Mesquite trees were sprayed to wet, but not to the point of dripping.

Table 1. Location and date of application for treatments.

| County | Ranch | Date of Treatment |
|-------------|------------|-------------------|
| Brown | Perkins | 8/2/02 |
| Coleman | Huston | 6/5/02 |
| Lampasas | Wittenburg | 7/24/02 |
| Mills | Head | 6/13/02 |
| Shackelford | Leech | 6/4/02 |

Results and Discussion:

Preliminary results from these herbicide trials will not be available until 2003.

Acknowledgments:

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Trade names of commercial products used in this report are included only for better understanding and clarity. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M University System is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.