Generic Triclopyr (Micro Flo) for Control of Mesquite

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SUMMARY

Herbicide trials were established in Coke, Menard and Tom Green counties during the summer of 2002 and in Coke, Menard, Schleicher and Tom Green counties in 2003 to evaluate a new generic triclopyr for mesquite control. The herbicide trials included comparisons of generic triclopyr (Micro Flo) with Remedy, when applied as the Brush Busters stem spray, leaf spray or cut stump spray.

First year evaluations for treatments applied in 2002, showed excellent apparent mesquite mortality for all treatments applied and no significant difference between control achieved with Micro Flo triclopyr and Remedy. This data should be considered preliminary. All trials will be re-evaluated in 2004.

PROBLEM/INTRODUCTION

Triclopyr is one of the most commonly used herbicides to control woody plants on rangeland. Sold under the trade name Remedy, this herbicide can be mixed with diesel or vegetable oil and applied to the basal stems or cut surfaces of target plants. Triclopyr can also be mixed with Reclaim (active ingredient clopyralid) and applied as a leaf spray to mesquite. As of this date, the only source of triclopyr labeled for Texas rangelands is Remedy, manufactured by Dow AgroSciences. Micro Flo recently obtained a generic triclopyr they plan to market for Texas rangelands. A comparison of the efficacy of this generic triclopyr as compared to the Remedy label would be helpful when making future purchasing decisions.

OBJECTIVES

The objective of these trials is to:

Compared efficacy of the Micro Flo generic triclopyr to Remedy when applied as the Brush Busters stems spray, leaf spray and cut stump spray for control of mesquite.

MATERIALS/METHODS

Table 1 shows location, date of establishment and treatments applied. A description of the treatments follow:

Brush Busters Leaf Spray The spray mix consisted of 1/2% Remedy or generic triclopyr combined with 1/2% Reclaim, mixed with water. Surfactant and spray marking dye were added at a concentration of 1/4% each to the spray tank. A 4 wheel ATV, equipped with 14 gallon spray tank, 12 volt pump and spray wands (X8 nozzles) was used to apply the spray mix. Mesquite leaves were sprayed to glisten.

Brush Busters Stem Spray The spray mix in Coke and Menard counties treating smooth barked mesquite consisted of 15% Remedy or generic triclopyr plus 85% diesel. The Tom Green county site was dominated by rough barked mesquite and a 25% concentration of Remedy or generic triclopyr plus 75% diesel was used for the stem spray. Application at all sites was made with a "Solo" backpack sprayer and a 5500-X1 conejet nozzle. The basal stems of each mesquite treated was sprayed to wet, but not to the point of runoff, from ground line to a height of 12 inches, on all sides of the trunk.

<u>Brush Busters Cut-Stump Spray</u> Mesquite was cut at ground level using a chain saw. The cut stump was sprayed to wet using a 15% concentration of Remedy or generic triclopyr plus 85% diesel.

Table 1. County, ranch, application dates and treatments applied for the 4 control sites.

Year Established	County	Ranch	Application Date	Leaf Spray	Stem Spray	Cut Stump
2002	Coke	Walker Ranch	July 11	√	√	
	Menard	Wright Ranch	July 19	√	√	
	Tom Green	Carlsbad State School	June 14		√	√
2003	Coke	Luckett	August 7	√	√	
	Menard	Wright	July 23	√		√
	Schleicher	Kohls	July 31	√		
	Tom Green	Harper	July 30		√	V

RESULTS/DISCUSSION/ECONOMIC IMPACT

First year apparent mortality was available only from the trials established in 2002. Preliminary results show excellent first year mesquite control for all methods of treatment and no significant difference between control obtained with Remedy or Micro Flo triclopyr (Table 2). These results should be considered preliminary. All trials will be re-evaluated in 2004.

Table 2. Percent apparent mesquite mortality one year following treatment.

Year Establishe d	County	Leaf Spray		Stem Spray		Cut Stump	
		Remedy	Generic	Remedy	Generic	Remedy	Generic
2002	Coke	90	93	81	92		
	Menard	93	86	85	84		
	Tom Green			83	76	89	100
	Average	92	90	83	84	89	100
2003	Coke	a	a	a	a		
	Menard	a	a			a	a
	Schleiche r	a	a				
	Tom Green			a	a	a	a
	Average	a	a	a	a	a	a

a - Will not be evaluated until 2004.

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