

Individual Plant Treatment Demonstrations on Mesquite

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SUMMARY

Three sites were established in 2009 to demonstrate the Brush Busters method of chemically treating individual mesquite trees. These sites will be used by County Extension Agents as an educational example of recommended mesquite control strategies. Mortality evaluations will be conducted for two years after treatment.

OBJECTIVES

Mesquite is an aggressive invader of rangelands. When left unchecked, mesquite can grow in dense thickets reducing desired forage production. Once mesquite gets to this stage control options are much more expensive and logistically difficult. However, smaller mesquite trees can be managed easily and effectively using the proper control strategy. It is for this reason that the Brush Busters approach to individual plant treatments has become increasingly viewed as a favorable alternative. The premise of the program is to control the smaller plants before they become a large problem. There are two Brush Busters individual plant treatment methods for chemical control of mesquite. The first is a basal stem spray method using Triclopyr. The second is a foliar applied leaf spray method using Triclopyr plus Clopyralid. When properly applied, excellent results with both Brush Buster treatments have been obtained.

The objective of this project is to install sites in Central Texas demonstrating the Brush Busters method of using individual plant treatments to control mesquite. These sites will be used by County Extension Agents to educate agricultural producers on effective mesquite control strategies.



MATERIALS AND METHODS

Mesquite individual plant treatments were applied on June 18, 2009 on the Rockin' H property in Hood County, on July 1, 2009 on the Cervetto property in Erath County, and on September 3 on the Ray property in Bell County. Treatments were applied using backpack sprayers equipped with X8 nozzles for foliar treatments and X3 nozzles for basal stem spray treatments. Foliar treatments were applied when the soil temperature at 1 ft. deep was at least 75° F and leaves were dark green in color, exhibiting no new growth. Plant sizes ranged from 2-8 ft. and those at the Bell County site had approximately 25% defoliation. Herbicides, rates, and application method for all sites are presented in Table 1.

Table 1. Herbicides, rates, and application method for mesquite IPT demonstration sites established in 2009.

Treatment No.	Method	Herbicide	Rate (pr/acre)	Material/plot
Rockin' H Site				
1	Foliar	Remedy Ultra	0.50% v/v	96.0 ml
		Reclaim	0.50% v/v	96.0 ml
		MSO	1.00% v/v	192.0 ml
2	Stem Spray	Remedy Ultra	15.00% v/v	19.2 oz
		Basal Oil	85.00% v/v	108.8 oz
Cervetto Site				
1	Foliar	Remedy Ultra	0.50% v/v	19.0 ml
		Reclaim	0.50% v/v	19.0 ml
		NIS	0.25% v/v	10.0 ml
2	Stem Spray	Remedy Ultra	15.00% v/v	4.8 oz
		Basal Oil	85.00% v/v	27.2 oz
Ray Site				
1	Stem Spray	Remedy Ultra	15.00% v/v	19.2 oz
		Basal Oil	85.00% v/v	108.8 oz

RESULTS AND DISCUSSION

Initial mortality estimates will be available in 2010.

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