



## Result Demonstration Report

2018 Herbicide Comparison Study for Controlling Greenbrier

Cavender's Neches River Ranch  
 Cooperator

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 and Anderson Counties

### Summary

Herbicides have been proven to be an effective method for controlling weeds in forage systems. Greenbrier is a very tough weed to control in pastures. Producers face many choices when selecting various products to be used in forage systems for adequate weed control.

### Objective

The objective of this result demonstration was to compare herbicide effectiveness on greenbrier control in forage systems.

### Materials and Methods

Materials and rates of herbicides used for this experiment is shown in Table 1. The trial was a strip trial that was not replicated. Plots were treated on June 28, 2018 using a tractor and sprayer calibrated at 15 gallons per acre rate. Plot size was 30 x 30 feet



Time: 10 a.m.-12 p.m.

Air Temperature: 88°

Soil Temperature: 86°

Relative Humidity: 90%

Wind: South to South at 8 MPH

Cloud Cover: 15%

**Table I. Herbicide, Rates, and Surfactant Used In Study**

<b>Plot</b>	<b>Herbicide</b>	<b>Rate</b>
1	Remedy Ultra	2% V/V.
2	PastureGard HL	2% V/V
3	Remedy Ultra + Chaparral	2% V/V & 6.6 oz/100 gal
4	Surmount	2% V/V
5	Remedy Ultra + Grazon Next HL	2% V/V
6	PastureGard HL + Chaparral	1% V/V & 6.6 oz/100 gal
7	Remedy Ultra + 60% Metsulfuron Methyl	2% V/V + 0.3 oz/acre
8	CONTROL	
9	Chaparral	6.6 oz./ 100 Gal
10	Corteva (Dow) Numbered Compound	Pre-measured amount for plot size in 4 gallons of water

Trade names of commercial products used in this report is 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 Texas AgriLife Extension Service and 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.

## Results and Discussion

Plots were treated on June 28, 2018 using a pull behind sprayer with a cluster nozzle. Sprayer was calibrated to apply 15 gallons of spray solution per acre. Ratings were taken after treatment at approximately 30, 60, 90, and 120 Days after treatment. The results are in Table II. Table III shows the cost of each individual treatment for 1 acre rate of tank mix.

**Table II. Percent Control for 30, 60, 90 & 120 Days after Treatment**

Plot	Herbicides Used	Greenbrier % Initial Plot Coverage	% Control 30 Days After Treatment	% Control 60 Days After Treatment	% Control 90 Days After Treatment	% Control 120 Days After Treatment
1	Remedy Ultra	40%	Discoloration	Discoloration	40%	40%
2	PastureGard HL	50%	Discoloration	Discoloration	40%	40%
3	Remedy Ultra + Chaparral	50%	10%	20%	65%	65%
4	Surmount	60%	25%	25%	50%	50%
5	Remedy Ultra + Grazon Next HL	90%	75%	75%	90%	90%
6	PastureGard HL + Chaparral	85%	70%	70%	70%	70%
7	Remedy Ultra + 60% Metsulfuron Methyl	60%	Discoloration	Discoloration	20%	20%
8	CONTROL		0%	0%	0%	0%
9	Chaparral	85%	Discoloration	Discoloration	40%	40%
10	Dow Numbered Compound	75%	45%	45%	50%	50%

**Table III. 2018 Greenbrier Control Demonstration Cost/Gallon**

<u>Chemical (s) and Application Rates</u>	<u>Cost (\$)/Acre</u>
Remedy Ultra @ 2% v/v = 2.56 oz/gallon	<b>\$21.12</b>
PastureGard HL @ 2% v/v = 2.56 oz/ gallon	<b>\$36.01</b>
Remedy Ultra @ 2% = 2.56 oz. + Chaparral @ 6.6 oz. / 100 gal.	\$21.12 + \$37.95/100 gal water  Or \$21.12 + \$5.69 = <b>\$26.81/acre</b>
Remedy Ultra @ 2% = 2.56 oz. + Grazon Next HL @ 2% =2.56 oz.	<b>\$34.94</b>
Surmount @ 2% =2.56 oz.	<b>\$18.90</b>
Remedy Ultra @ 2% = 2.56/oz.+ Metsulfuron Methyl @ 0.3 oz.	<b>\$22.32</b>
Corteva (DOW) Numbered Compound	Numbered Product Not on Market
Chaparral @ 6.6 oz./100 gallons Water	37.95/100 gal  Or <b>\$5.69/acre</b>
PastureGard HL @ 1% = 1.28 oz./gallon + Chaparral @ 6.6 oz./ 100 gallon water	\$18 + \$37.95/100 gal water  Or \$18 + \$5.69 = <b>\$23.69/acre</b>

\* Costs from Rozell Sprayers & Manufacturing and River Specialties (December 5, 2018) for Herbicide Only no, Surfactant

**Remedy Ultra** = \$70.00per 1.0/gal = \$70.00/128 = \$0.55/ounce x 2.56 x 15 gal= \$21.12/acre

**PastureGard HL** = \$120.00/gal = \$120.00/128 = \$0.94/ounce x 1.28 oz. x 15 gal = \$18.00/acre

**PastureGard HL** = \$120.00/gal = \$120.00/128 = \$0.94/ounce x 2.56 oz x 15 gal = \$36.10/acre

**Chaparral** = \$92/pound = \$92/16oz = \$5.75/ounce x 6.6 oz/100 gal= \$37.95/100 gal water.

0.066 oz/gal x 15 gal/acre rate= 0.99 ounces x \$5.75/ounce = \$5.69/acre

**Surmount** = \$55.00/gal or \$157.50 per 2.5/gal = \$157.50/ 320 = \$0.49/ounce x 2.56 oz. = \$1.26 x 15 gal/acre = \$18.90/acre

**Grazon Next HL** = \$92.00 per 2.0/gal. = \$92.00 / 256 = \$0.36/ounce x 2.56 oz = 0.92 x 15 gal = \$13.82/acre

**Metsulfuron Methyl** = \$0.40/tenth x 3 = \$1.20/acre

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## **Conclusions**

This is the first year of a multi-county research trial. It was very dry for the first 3 months of the result demonstration. This could have had an effect on the soil activity of some of the herbicides. Very positive results have occurred. More research needs to be conducted to get an accurate account on which herbicides would be effective in controlling greenbrier in forage systems.

## **Acknowledgements**

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