



Result Demonstration Report

2022 Herbicide Comparison Study for False Indigo Control

Mr. Jimmy Arp
Cooperator

Clint Perkins, Dr. Jamie Sugg, Shaniqua Davis & Aaron Low
Texas A&M AgriLife Extension Service County Agents for Smith, Rusk, Gregg & Cherokee
Counties

Summary

Herbicides have been proven to be an effective method for controlling broadleaf weeds in forage systems. Producers face many choices when selecting various herbicides to be used in warm season forages for adequate control of weeds. False Indigo (*Baptisia spp.*) is a perennial broadleaf legume prevalent in the East Texas region that is persistent in hay meadows and grazing pastures. Currently, there is no herbicide labeled to control False Indigo (*Baptisia spp.*).

Objective

The objective of this result demonstration was to compare herbicide effectiveness on False Indigo control in warm-season forage systems.

Materials and Methods

Materials and rates of herbicides used for this experiment are shown in Table 1. Plots were treated on April 13, 2022, using a tractor mounted sprayer. The herbicide plots were 16 x 50 feet. The tractor mounted sprayer was calibrated to apply 16 gallons of spray solution per acre.

Start Time 10:20 AM

Air Temp 78 degrees

Soil Temp 78 degrees

67% Humidity

Wind Speed ENE 5 mph

Cloud Cover: 20%

End Time 12:45 PM

Table I. Herbicide & Rates Used in Study

Plot	Herbicide	Rate per Acre
1	Control	
2	PastureGard	2 pints (32 oz)
3	DuraCor	20 oz
4	Grazon Next HL	32 oz
5	Weed Master & Remedy	3 pints (48 oz) & 8 oz
6	Grazon P+D	32 oz
7	Surmount	5 pints (80 oz)
8	DuraCor & Remedy	20 oz & 8 oz
9	MezaVue	24 oz

Results and Discussion

Plots were treated on April 13, 2022, using a tractor mounted sprayer calibrated to apply 16 gallons per acre spray solution. Ratings were taken at approximately 30 & 60 days after treatment (DAT). The results are in Table II. Table III shows the cost of each individual treatment on a per acre basis.

Table II. Percent Control 30 & 60 Days after Treatment (DAT)

Plot	Herbicide	Application Rate/Acre	30 DAT	60 DAT
1	Control		0	0
2	PastureGard	2 pints	10	70
3	DuraCor	20 oz	20	70
4	Grazon Next HL	32 oz	20	75
5	Weed Master & Remedy	3 pints & 8 oz	50	95
6	Grazon P+D	32 oz	35	95
7	Surmount	5 pints	90	99
8	DuraCor & Remedy	20 oz & 8 oz	40	80
9	MezaVue	24 oz	90	95

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.

Table III. 2022 Herbicide Comparison Study for Controlling False Indigo Plant in Warm-Season Forage Systems Cost/Acre

<u>Herbicide (s)</u>	<u>Application Rates/Gallon</u>	<u>Cost (\$)/Acre</u>
PastureGard	32 oz	\$35.20
DuraCor	20 oz	\$17.34
Grazon Next HL	32 oz	\$15.23
Weed Master & Remedy	48 oz & 8 oz	\$19.44
Grazon P+D	32 oz	\$10.53
Surmount	80 oz	\$47.20
DuraCor & Remedy	20 oz & 8 oz	\$22.98
MezaVue	24 oz	\$21.60

* Costs are the average retail prices from Rozell Sprayers & Manufacturing and Red River Specialties (December 14, 2022) for Herbicide Only no, Surfactant

PastureGard HL = \$141.00 per gallon = \$141/128 oz = \$1.10/oz x 32 oz per acre = \$35.20 per acre

DuraCor = \$111 per gallon = \$111/128 oz = \$0.867/oz x 20 oz = \$17.34 per acre

GrazonNext HL = \$121.75 per 2 gal = \$121.75/256 oz = \$0.476/oz x 32 oz = \$15.23 per acre

Weedmaster = \$92 per 2.5 gal = \$92/320 oz = \$0.288/oz x 48 oz = \$13.80 per acre

Remedy Ultra = \$90.25/gal = \$90.25/128 oz = \$0.705/oz x 8 oz = \$5.64 per acre

Grazon P+D = \$105.25/2.5 gal = \$105.25/320 = \$0.33/oz x 32 oz = \$10.53 per acre

Surmount = \$1189 per 2.5 gallons = \$189/320 = \$0.59 per oz x 80 oz (5 pints) = \$47.20 per acre

MezaVue = \$115.50 per gal = \$115.50/128 oz = \$0.90 per oz x 24 oz = \$21.60 per acre

Conclusions

This is the first year of a three-year multi-county applied research trail. Very positive results have occurred. Herbicides have proven to be an effective way of controlling False Indigo in warm season forage systems.

Acknowledgements

A special thanks to Mr. Jimmy Arp for allowing the result demonstration to be conducted on his property and to Mr. Darren Rozell (Rozell Sprayer and Manufacturing), Mr. Cary Parrott (Red River Specialties), and to Mr. Patrick Sutton (Corteva Agriscience), for donating the herbicides that were used in the result demonstration project.