EVALUATION OF VARIOUS PRODUCTS FOR CONTROLLING GREEN FLATSEDGE

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SUMMARY:

With the extensive rains experienced in 2004, ranchers have noticed an increased infestation of Green Flatsedge (*cyperus virens*). Green Flatsedge is a sedge that thrives in damp, moist conditions and ultimately takes over rangeland and consequently, reduces grazable acres. It was first noticed in Victoria County in 1994. Its distribution continues to grow across the area causing havoc among the ranching community. If Green Flatsedge can successfully be controlled, ranchers will experience a significant increase in forage availability and quality.

Our goal is by the fall of 2006, to have a better handle on fall versus spring treatments. At the present, it appears Grazon P+D and Cimarron Max would be the products of choice for a fall application. Weedmaster and Cimarron Max currently look the most promising as far as a spring application is concerned.

OBJECTIVE:

To evaluate various herbicide treatments and rates for their efficacy in controlling dense, undisturbed stands of Green Flatsedge in rangeland.

MATERIALS and METHODS:

Five adjoining ½ acre plots were treated on September 24, 2004. 8004XR nozzles were used to apply 20 gallons of water per acre at 30 psi. Travel speed at application was 4 mph. The treatments included:

Grazon P+D – 2 qt.
1 pt. Remedy + 1 pt. Tordon 22 K
Redeem – 3 pt.
0.6 oz. Ally + 4 pt. Weedmaster (Cimarron Max)
Surmount – 3 pt.

All above treatments are calculated on an acre basis.

RESULTS and DISCUSSIONS:

YEAR 1 DATA:

The demonstration was evaluated on December 10, 2004. The Grazon P+D treatment yielded the highest initial results recording 70 percent of the plant dead. Very little regrowth appeared evident with this treatment.

The Remedy + Tordon, Redeem, and Cimarron Max treatments showed about 50 percent of the plant dead. It appeared we did not get as good of plant coverage as desired resulting in considerably more regrowth.

The final treatment, Surmount yielded the poorest initial results. Very little burnback was present resulting in only 30 percent of the plant dead.

Keep in mind these are only preliminary results and a more complete evaluation in 2005 will be necessary.

YEAR 2 DATA:

On November 17, 2005 the final evaluation was conducted. Dr. Wayne Hanselka, Extension Range Specialist assisted in rating the plots. The only treatment that yielded measurable results was Cimarron Max with 70 percent control. The other treatments showed no results 14 months after initial spraying. Again, this was on large, dense, undisturbed stands of green flatsedge.

In neighboring Jackson County, these same treatments were applied to shredded stands as well as undisturbed stands of green flatsedge. The application was made 2 ½ weeks after shredding. On November 17, 2005 the plots were rated yielding the following results. See Table 1.

Table 1. Evaluation of various products for controlling Green Flatsedge. Clarence Schomburg, Cooperator, Ganado, TX, Jackson County, TX.

		% Control	
Treatment	**Rate/Ac**	**Shredded**	**Undisturbed**
Grazon P+D	2 qt.	98	60
Remedy + Tordon 22K	1 pt. Remedy 1 pt. Tordon 22K	50	20
Redeem	3 pt.	50	20
Cimarron Max	2 qt. Weedmaster 0.6 oz Ally	98	75
Surmount	3 pt.	50	20

Obviously there is a substantial difference in efficacy of control on plants that have been shredded. This could be due to more uniform plant coverage with a ground rig and better translocation of chemical through fresh tender plant growth. The question still arises, is it better to treat in the fall or spring? We still don't have a good answer, thus another series of treatments were put out on June 8, 2005 adjacent to the September 2004 treatments. These products and rates were:

1. Grazon P+D 2 qt./ac
2. Weedmaster 2 qt./ac
3. Redeem 2 qt./ac
4. Cimarron Max 2 qt./ac
5. Surmount 2 qt./ac
6. Pasture Guard 2 qt./ac

Preliminary results show Weedmaster and Cimarron Max having the most effect with 75 percent control. A more detailed and complete evaluation of the spring treatments is scheduled for 2006.

The following table illustrates the chemical cost comparison between the fall and spring treatments. See Table 2.

Table 2. Cost comparison of chemical only on spring and fall treatments of Green Flatsedge. Victoria County, TX.

Fall 2004 Treatments			**Spring 2005 Treatment**		
Cost Comparison (Chemical Only)					
Treatment	**Rate/Ac**	**Cost/Ac**	**Treatment**	**Rate/Ac**	**Cost/Ac**
Grazon P+D	2 qt.	$14.70	Grazon P+D	2 qt.	$14.70
Remedy + Tordon 22K	1 pt. 1 pt.	$23.32	Weedmaster	2 qt.	$13.70
Redeem	3 pt.	$24.19	Redeem	2 qt.	$32.25
Cimarron Max	2 qt. Weedmaster + 0.6 oz Ally	$26.80	Cimarron Max	2 qt.	$26.80
Surmount	3 pt.	$20.70	Surmount	2 qt.	$27.60
			Pasture Guard	2 qt.	$26.50

As noted, chemical costs can be very expensive. Our goal is to continue to try products at different rates in an effort to obtain measurable results at a realistic economic threshold. Unquestionably, this is a challenging weed to control. It is important to note that treatments on green flatsedge will likely need to be continual (year after year).

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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 is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.