



Presidio County
Jesse Lea Schneider CEA – Ag/NR
Box 581
Marfa, TX 79843
(432)729-4746

2012 *Nolina texana* (sacahuista) Result Demonstration

Summary

Nolina texana, also called sacahuista, is a perennial shrub in the lily family. The clumps are composed of long, slender, coarse leaves. It often grows on rocky slopes in the Trans-Pecos, Edwards Plateau, and South Texas Plains and less commonly in the Rolling Plains regions of Texas. It blooms during years with adequate rainfall and the blooms are readily consumed by livestock. The flowering parts contain a saponin that is toxic to livestock, especially sheep and goats. Cattle in the Marfa Plateau region are known to eat the blooms with no apparent side effects.

Although cattle will consume the leaves it is not a highly preferred browse species and as such can form dense populations, thereby reducing forage production and lowering the suitability for grazing sheep and goats in these pastures

Objective

In this result demonstration we compare the current recommended treatment of ¼ oz. Spike 20P (tebuthiuron) pellets per plant with 2cc undiluted Remedy Ultra (triclopyr) applied to the whorl with a drench gun.

Materials and Methods

Both applications were made on September 14, 2010 in the same pasture. Plots are separated by a ranch road. Spike 20P Economical Dispenser dispenses a single dose (1/4 oz.) of pellets, which were scattered around the base of each sacahuista clump. Remedy Ultra was applied to the whorl in the center of each plant with a drench gun adjusted to dispense a 2cc dose.

Results and Discussion

An evaluation of the plots was conducted on September 19, 2011. Large plants within the Spike 20P treatment plot appeared healthy. All small plants, about 75% of total plants, were completely yellow (Figure 1). All sacahuista plants within the Remedy Ultra plot were completely yellow (Figure 2). A second and final evaluation was conducted September 28, 2012. All small plants in both treatments were dead. Large plants in both treatments had some green foliage but the ends of the green foliage were yellow (Figures 3 and 4). It is not known whether these plants will survive or if the herbicide activity was delayed as a result of the 2011 drought, which slowed root uptake of Spike20P and translocation of Remedy Ultra to the roots.

Plot No.	Herbicide and Formulation	IPT Rate	# Plants Treated	Cost \$	Apparent Mortality	
					Yr. 1	Yr. 2
1	Spike 20P	¼ oz. pellets per plant	407	119.27	75%	85%
2	Remedy Ultra	2 cc per whorl, undiluted	1095 whorls	56.62	100%	90%

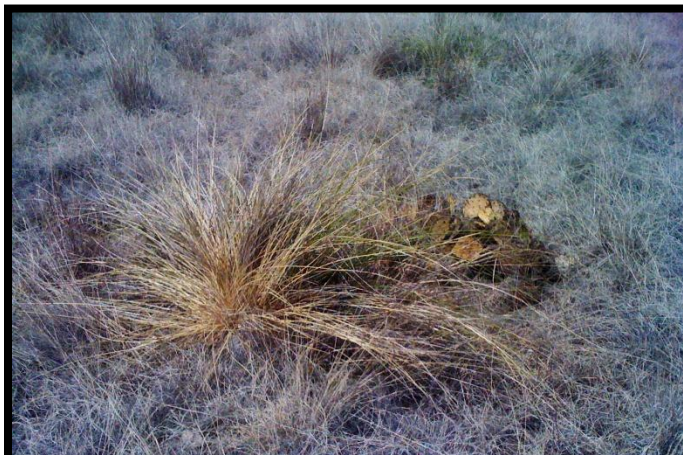


Figure 1. Sacahuista plant in Plot 1, September 19, 2011



Figure 2. Sacahuista plants in Plot 2, September 19, 2011



Figure 3. Sacahuista plant in Plot 1, September 28, 2012



Figure 4. Sacahuista plant in Plot 2, September 28, 2012

ACKNOWLEDGMENTS

This project was supported by the Klein Family, the Dipper Ranch, and Dow AgroSciences.

The information provided herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas AgriLife Extension.

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.