



**2015 Smutgrass and Valpar-L Result Demonstration**  
**Brock Fry, County Extension Agent – Agriculture, Jasper County**  
**Vanessa Corriher-Olson Specialist, Overton, TX**

**Relevance:**

In Jasper County, TX smutgrass can become a problem if it is not controlled. Smutgrass is tufted perennial grass native to North America. Because smutgrass is unpalatable to livestock animals avoid grazing it. Smutgrass has a prolific seed head and spreads rapidly to take over a pasture. Smutgrass also is a negative because it reduces the grazing capacity of a pasture. Its name is derived from the black fungus that grows around the seed head when it is mature.



**Response:**

After observing several fields with smutgrass, a result demonstration was set up to show control with Valpar-L herbicide manufactured by DuPont. Valpar-L is labeled for the control of smutgrass and is often recommended. This study was to determine the effectiveness of Valpar-L on the control of smutgrass plants in an East Texas cattle pasture.

**Materials and Methods**

**Materials:**

A Bermuda grass pasture in the Jasper area was used to conduct the study. The field has estimated 40-60% coverage of smutgrass depending upon the the location in the pasture. This pasture has several types of foliage growing in it. This pasture is primarily used for grazing livestock. The location in the pasture that was selected had less than 20% smutgrass, and had several other nuisance plants such as blackberry, smartweed, and horsenettle to control as well. The soil is a sandy loam with lots of organic matter.

**Valpar-L Active Ingredient:**

Hexazinone [3-cyclohexyl-6-(dimethylamino) -1-methyl-1,3,5-triazine-2,4(1H,3H)-dione]  
 25% by weight.

**Method:**

12 randomly selected adjacent plots were used. Each plot was 10X20 feet or 200 sq ft.

1	3	2	2	3	1	3	1	2	1	2	3
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Plots #1 were used as a control and no herbicide was applied

Plots #2 were the fall application

Plots #3 were the spring application

Because the plots were small in nature the use of a backpack sprayer was necessary. The backpack is a Red River piston pump, 4 gallon capacity. An OC8 spray tip and applied 15 gallons per acre. 4 pints per acre was the rate mixture with water for application. Cost was \$212.50 for 2.5 gallons of Valpar-L during this study.

**Applications:**

The spring application was made on May 7, 2015

The fall application was made on October 1, 2015

**Weather Conditions:**

Because Valpar – L is a soil-based herbicide that is taken up by the plant roots the applications were timed before rain events. This product works best with a rain in less than 2 weeks after application. This is important to aid herbicide soil penetration following application.

**Applications:**

May 7, 2015

Temperature Hi 83 Lo 61

Humidity 76

Wind 5 mph

October 1, 2015

Temperature Hi 86 Lo 63

Humidity 63

Wind 4 mph



George Bieber – Red River Specialist

**Results:**

The application of Valpar-L herbicide was successful because it reduced the smutgrass plants. While other weeds were not the focus of this study it reduced other weed species including Black Berry, Horse Nettle, and Smart Weed. The selected area for the demonstration had less than 20% smutgrass.

Control plots were unaffected by applications. No application was used in the control plots.

Smutgrass Control %												
Plots	1	2	3	4	5	6	7	8	9	10	11	12
Before	2	0	0	5	10	4	2	5	3	0	2	5
After	2	0	0	0	0	4	0	5	0	0	0	0

Plot #	1	3	2	2	3	1	3	1	2	1	2	3

Smutgrass control in Plots 2 and 3 were 100%.  
 No smutgrass remained 1 month after either application.

Other weeds were controlled at 100%.

After applications a lot of bare ground was exposed, it was undetermined exactly what all the Valpar-L controlled based upon follow-up visits. The Bermuda grass present started encroaching on in the areas 2 months after the application.



**Spring application, 2 months**



**Herbicide plot and Control plot**



**Spring application, 2 months**



**Spring application, 6 months**

**Considerations:**

VELPAR® L is an effective general herbicide providing both contact and residual control of many annual, biennial and perennial weeds and woody plants. Care must be exercised when applying

VELPAR® L near desirable trees or shrubs as they can absorb VELPAR® L through roots extending into treated areas.

DO NOT make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

VELPAR® L is labeled for control of smutgrass and other weeds in established stands of bermudagrass and bahiagrass.

Use a lower rate on coarse-textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

Suppression may result with some of the giant (larger) smutgrass species.

Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

Livestock may be grazed immediately following a broadcast application of VELPAR® L at rates of 4.5 pints per acre or less, and treated vegetation may be cut, dried, and fed after 38 days.

**Summary and Conclusions**

The application of Valpar-L controlled all the smutgrass plants present at 4 pints per acre. The cost is \$42.52 per acre which is \$10.63 per pint. Depending upon the control area, soil type may affect how much Valpar-L is used 2  $\frac{3}{4}$  - 4  $\frac{1}{2}$  pints for smutgrass control. Spring and fall applications of Valpar-L had similar results of reducing smutgrass. The applications showed effective control of smutgrass and other weeds.

**Future Investigation:**

Further studies in the following year are needed to report on growth of any smutgrass plants rejuvenation. Valpar-L is a one application per year herbicide by the label.

**Partners:**

Many thanks Wallace Gilchrist for hosting this result demonstration on his farm. Thanks to Red River Chemical and Sales Representative George Bieber for providing and applying the herbicide. Thanks for taking the time and investing in the knowledge and growth of pasture owners in Southeast Texas. This demonstration would not have been possible without your support and the support of the Jasper County Agriculture Programs Committee.