

Grassy Weed Control Demo in Bermuda

Cooperator: Aaron Asencio

Agents: Johnny Gunsaulis, Benton County; Blair Griffin, Johnson County



Dallisgrass

Paspalum dilatatum is a species of grass known by the common name dallisgrass, Dallas grass, or sticky heads. It is native to Brazil and Argentina, but it is known throughout the world as an introduced species and at times a common weed. Its rapid growth and spreading rhizomes make it an invasive pest in some areas.

Life cycle

A perennial grass.

Growth habit

Dallisgrass grows in spreading clumps. Has a coarse texture. Leaf blades are a yellow-green color and are about ½ wide. There is a white vein that runs down the middle of the leaf blade.

Reproduction

Spreads by seed.

Conditions that favor growth

Adapts to areas of poor drainage.



Crabgrass:

Summer annual. Grows up to 2 ft. tall; decumbent growth habit; swollen nodes. May root at nodes. Dies after the first frost in the fall.

Reproduces by seed. Seeds germinate from spring through late summer.

Presents a problem in hay from a drying standpoint which can lead to mold.



Barnyard Grass:

A coarse tufted grass of the family Poaceae, a noxious agricultural weed. Although native to tropical Asia, barnyard grass can be found throughout the world, thriving in moist cultivated and waste areas.

The plant can severely deplete soil nitrogen levels in agricultural fields, leading to lower crop yields and even crop losses in areas with heavy infestation.

Thrives in wet areas of the field and in wet seasons of the year.

Background:

Aaron Asencio manages a Bermuda field that he cuts for hay. His desire is to be able to provide his customers with a high quality forage. Some of these grassy weeds have caused his customers to be concerned about the current quality of his hay due to mold, foxtail seed heads, and grasses and seed heads that the customers can't identify causing them to be suspicious of the hay quality.

He also has been displeased with the way the field looks due to the grassy weeds now in the field.

Demonstration Design:

Six different herbicide treatments were chosen to be evaluated in their control of these troublesome grassy weeds.

Treatment	Herbicide	Rate
1	Paramount	32 ounces per acre
2	Paramount	32 ounces per acre
	Roundup	6 ounces per acre
3	Roundup	10 ounces per acre
4	Pastora	1 ounce per acre
	Roundup	4 ounces per acre
5	Pastora	1.5 ounces per acre
6	Roundup	10 ounces per acre
	Metsulfuron	0.3 ounces per acre

Treatments were applied using a backpack sprayer on July 8, 2020. Field had 14 days of regrowth on it. Grasses were 3-5 inches tall.

Results: The following photos were taken on July 20, 2020

Treatment 1:



Treatment 2:



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Treatment 3:



Treatment 4:



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Treatment 5:



Treatment 6:



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All treatments showed grass injury to the herbicide treatment initially. However, they didn't all control the grassy weeds evaluated.

Plot notes 07/20/2020

Plot 1- 0 bermuda injury, 90% control of crabgrass, purple tips on dallis grass

Plot 2 – Bermuda stunted, 95% crabgrass control, entire leaves purple on dallisgrass

Plot 3- Bermuda severely stunted, 90% control of crabgrass, purple leaves on dallisgrass

Plot 4- minimal Bermuda injury, purple leaves on dallisgrass, 50% crabgrass control

Plot 5 – minimal Bermuda injury, purple leaves on dallisgrass, 50% control of crabgrass

Plot 6 – Bermuda suppression, purple leaves on dallis, 90% crabgrass control

Ratings on August 11

% Control of these weedy grasses

Treatment	Dallisgrass	Crabgrass	Barnyard Grass
1	0	60	90
2	80	50	95
3	90	80	70
4	70	0	80
5	90	0	80
6	90	90	90

Plots were again evaluated for control on September 1, 2020, 55 days after initial treatment.

% Control of these grassy weeds

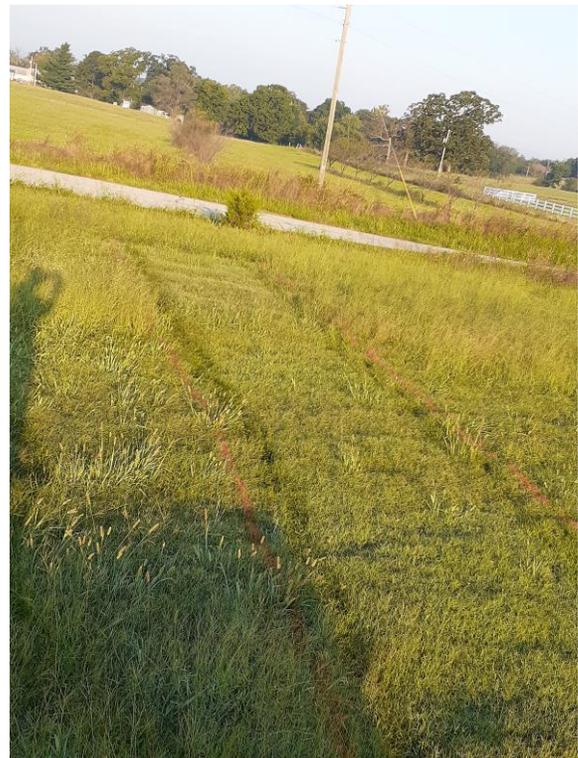
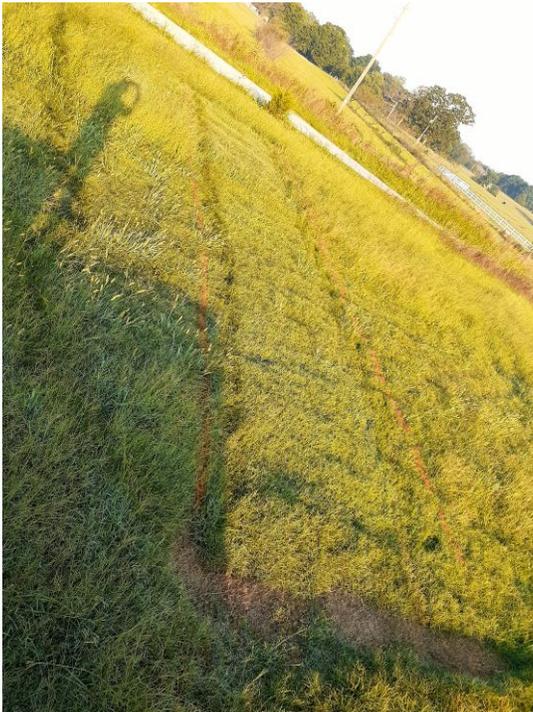
Treatment	Dallisgrass	Crabgrass
1	0	40
2	80	50
3	100	95
4	90	0
5	90	0
6	95	95

Notes: Results may vary depending on rainfall, soil moisture, density of Bermuda stand and soil fertility. When plots were rated on September 1, the field had been through a period of dry weather and the Barnyard grass in the field was insignificant so this grass was not rated in the final evaluation.

The results of Treatment 6 were consistent with the control shown in 2019 when 12 ounces of Roundup + 0.5 ounces of metsulfuron were evaluated for knotroot foxtail control on 38 sites in Arkansas. In the 2019 demonstrations, 12 ounces of Roundup + 0.5 ounces of metsulfuron provided 90% control of crabgrass and knotroot foxtail when applied in June and July.

Expect some Bermuda suppression at this rate. Although plot 6 dry matter production was estimated to be equal to or higher than the other plots due to the reduced competition from other grasses.

Final Photos of Plot 6 taken in early September



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