

White Triden Control

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Introduction

White triden (*Triden albescens*) is a member of the *Poaceae* grass family, similar to annual bluegrass. White triden is a relatively new grassy weed species in Arkansas that has proven to be very persistent in Southwest Arkansas. Some literature states that it may be used for grazing livestock and wildlife (Texas A&M Agrilife Extension website; NRCS Plant Guide website). It has been observed that cattle may graze it when it is young but tends to avoid grazing this species as it matures. It can be a nuisance in pastures and hay meadows.

White triden is an invasive perennial summer grass weed that has low forage quality. The white triden seed head emerges in July. Most producers don't recognize the problem until late in the growing season. In recent years it has become a concern to forage producers in South Arkansas.

White triden is a warm-season perennial grass with short-knotty, complex rhizomatous bases. Culms average 15 to 40 inches (40-100 cm) tall with 6 to 12 inch (15-30 cm) long blades that are flat, glabrous, with a blue-green color. Spikelets are white to pinkish purple-tinged. Caryopses are pale yellow to white. White triden averages 4,535,900 seeds per pound.

Objective

Forage producers have limited herbicide options for grass control in forage grass crops.

Our objective was to compare the effectiveness of grass herbicides, non-selective herbicides, and combinations of both for white triden control in forage grasses.

From 2016 – 2021 the UA-CES has conducted demonstrations in 2 counties. There were late spring pre-emergence herbicide and late summer demonstrations.

Treatments were applied @ 15 gallons per acre. Nonionic surfactant was added to all treatments at one quart per 100 gallons of spray mix.

Triden Control – Late Spring (June) (3 sites)

Herbicide	Rate/acre	\$/acre	Control %
Patriot + Round-up	0.5 ounce 12 ounce	\$3	80
Roundup	12 ounce	\$2	80
Pastora + Round-up	1 ounce 8 ounce	\$24	100
Pastora	1.5 ounce	\$22	80
Plateau	6 ounce		90

The best options for white triden control are the summer herbicide treatments. Round-up at 12 oz/acre and Patriot at 0.5 oz/acre plus Roundup 12 oz/acre resulted in the most consistent control.

Other treatments that were evaluated in some of the summer trials:

- Paramount at 32 oz/acre resulted in 40% control at \$44/acre cost.

Similar results were found with a late summer application of the same chemicals. While the results were similar, most white triden plants had formed seed heads and were at or near maturity.

As with other perennial grasses, preemergence herbicide applications are expensive and inconsistent.



Figures 3 and 4: White triden seed head. Spikelets can be white to pinkish purple-tinged. As they mature they become yellowish to white in color.



Figure 1: White Triden-Full plant with seed head



Figure 2: Roots are short-knotty, hard rhizomatous bases, shallow root system.

Conclusion

While still, a relatively new grass species to Arkansas white triden is a problem for forage producers in South Arkansas. It is a warm-season perennial with a shallow root system. As an immature plant, it can mimic bermudagrass in appearance; thus, many producers don't realize they have it until it is mature. Round-up and Round-up + Patriot combination provide economic control in late spring and late summer.