

# Smutgrass is a Weedy Grass

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If you've managed cattle on permanent pastureland anywhere south of the Tennessee state line, you may have encountered this troublesome weed during the summer months. Its prolific seed production, poor forage quality, and adaptability to various environments make this species one of the more problematic grass weeds in forage systems.

## What's the Big Deal?

There are two smutgrass species found in the U.S. – small smutgrass (*Sporobolus indicus*) and giant smutgrass (*Sporobolus jacquemontii*). Although giant smutgrass is primarily found in Florida, small smutgrass is the common one we see in Alabama. Smutgrass is a warm season perennial, clump-forming grass that is native to subtropical Asia and is now spread over millions of acres across the Southeast. The bunch size of mature plant foliage is usually 8-10 inches in diameter and approximately 12 inches tall depending on grazing pressure. Leaves are flat and generally hairless except for a few hairs around the collar where the leaf base meets the stem. Under little- to no grazing pressure, actively growing plants may be misidentified as bahia-grass foliage (Fig. 1).



Figure 1. Smutgrass can often look similar to bahiagrass in early summer.



Figure 2. Sticky seedheads create a black fungus, hence the name.

From mid- to late summer, mature plants can have stems that reach over 3 feet tall that produce inflorescence (flower clusters) in spikelets that range from 4 to 20 inches long. Each seedhead can produce over 1,000 brown seed that become sticky when wet which forms the black, smut-like fungus along the seedhead from which the plant gets its name (Fig. 2). The sticky seed are dispersed by attaching to livestock and machinery and also by surface water and wind.

Other than the new growth that occurs in early spring or following burning or mowing, smutgrass foliage quickly becomes tough and wiry and cattle usually avoid the plants. In permanent pastures, smutgrass clumps can be easily seen during late summer as cattle preferentially graze the surrounding desirable forages (Fig. 3). With desirable forage competition minimized by heavy grazing pressure, mature smutgrass seed can find a favorable environment to germinate and establish, which further exacerbates the spread of this unwanted grass weed.

## Control Options

Cultural and mechanical practices alone like burning or mowing are usually unsuccessful. Burning is even thought to scarify the seed



Figure 3. It's easy to spot smutgrass clumps in overgrazed pasture during late summer.

enough to increase germination. Disking can be a viable option for a few years as mature clumps are uprooted and often killed in dry weather. However, seed could still germinate in the newly disturbed ground and potentially reinfest the site.

Herbicide use is currently the most effective control strategy for smutgrass in warm season forages. Velpar or Tide Hexazinone at 1-2 quarts per acre (0.5-1 lb. hexazinone) is recommended on infested fields of established bahiagrass or bermudagrass. Application timing is best from June through September as long as plants are actively growing and adequate soil moisture is present. The addition of a surfactant is allowed for improved weed control, but it is not recommended in broadcast applications in pastures or hayfields as unwanted forage injury is likely. In ideal environments when hexazinone is applied, temporary yellowing in bahiagrass and bermudagrass can be expected, but should recover in 2-4 weeks depending on growing conditions. Do not apply hexazinone products to tall fescue or other cool season forages.

Velpar has activity on the target weed species through both the above-ground foliage as well as root uptake. Rainfall of 0.25-0.5 inches is necessary within 7-14 days following application for soil incorporation and improved control. There are no grazing restrictions as long as Velpar application rates remain at or below 4.5 pints per acre, however there is a 38-day haying restriction. Single applications are often not completely effective and therefore seasonal field scouting is necessary to evaluate smutgrass recovery.

Oak trees are highly sensitive to hexazinone so keep applications at least 100 feet away from these desirable species to avoid root uptake. Alternative options to Velpar include weed wiper or roller wick bar applications with glyphosate. Roundup (41% glyphosate) applied at 30-70% v/v solution has been shown effective in Dr. Brent Seller's work at the University of Florida. Two-way applications perpendicular to one another are usually more effective than one directional as long as smutgrass stem height is adequate for herbicide coverage. Keep in mind this is somewhat tedious and time consuming, but it is a more affordable method than Velpar and it's one of the few control options we have.

Making a fertilizer application following herbicide treatment will encourage growth of desirable forages as the herbicide is simultaneously at work within the target weed. If cattle are managed throughout this process to avoid overgrazing, the competition from desirable forages can work in your favor. Please read and carefully follow all herbicide label recommendations.



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