

Smutgrass Management in Bermudagrass and Bahiagrass Pastures

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Smutgrass (*Sporobolus indicus*) is a tuft forming non-native perennial weed that affects many improved perennial grass pastures in Texas, Florida, Georgia and other southern states. As a warm season perennial, smutgrass remains dormant in the winter, begins growing in the spring, and can produce seed from July to September. In Florida, smutgrass is considered the third most troublesome weed in pastures (Crawford 2007) likely due to its ability to adapt to almost all soil types and to its competitive nature in pastures. While some grazing of smaller more tender smutgrass may occur, cattle will not preferentially consume mature smutgrass possibly due to a reduction in forage quality as the grass matures (McCaleb et al. 1963; Smith and Cole 1972; Mullahey 2000). Therefore, if left untreated, smutgrass populations can dominate grazing lands to exclusion of the desirable species (Simon and Jacobs 1999).

Control of smutgrass through mowing, fertility management, and intensive rotational grazing has traditionally been difficult to achieve. While it has been shown that smutgrass growth will decline with intense grazing management

(Ahmad 1979), maintaining the needed level of grazing pressure without overgrazing desirable species can be very challenging.

More consistent management of smutgrass has been achieved through use of herbicides, and from the 1950's through the 1980's the only selective herbicide available was Dalapon (2,2-Dichloropropionic acid). In the late 1980's a new product called Velpar (hexazinone) was labeled for use in established stands of bermudagrass and bahiagrass for the control of smutgrass. Currently, Velpar® L VU is marketed and sold by Bayer and is the primary chemistry recommendation for the control of smutgrass across the southern US. Research has shown Velpar to provide good control when applied in late spring/early summer to actively growing smutgrass, when rainfall is typically sufficient to move the herbicide into the root zone for uptake. More consistent long-term control is typically achieved when a sequential application is made in the following year (Mislevy et al. 1999; Rana et al. 2015). Current pricing for Velpar would typically be around \$40/ac depending on the rate utilized. Based on research conducted by B. J. Brecke (1981),

hexazinone the active ingredient in Velpar, provided slightly better control of smutgrass in bahiagrass pastures and with lower phytotoxicity. When applying Velpar, care must be taken to maintain a buffer of 100 feet between the area of application and any desirable trees or death of the tree may occur. Application rates are 2¾ to 4½ pints per acre. Use the lower rate on sandy soils and the higher rate on heavier textured clay soils. Livestock may be grazed immediately following a broadcast application of Velpar® L VU Herbicide at rates of 4.5 pints per acre or less, and treated vegetation may be cut, dried, and fed after 38 days.

A non-selective herbicide option would be using glyphosate (Roundup) in a rope-wick, rotary wiper or spot treatment method. For rope-wick or rotary wiper applications, the recommended mixture is a 1:2 (1 gal of glyphosate in 2 gal of water) rate during active weed growth and for perennials, at seedhead formation. Livestock must be removed after application and a 14 day wait before grazing and harvesting. No more than one-tenth of any acre should be treated at a time. For spot treatments, a 1.5 to 2.0% solution of a 4.5 lb/gallon glyphosate product is recommended (2.0 to 2.5 fl oz per gallon of water). Livestock or hay harvest can return to spot-treated pastures 7 days after application.

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