Weed Management during Pasture Establishment

Brent Sellers, Jason Ferrell, João Vendramini, and Yoana Newman

Introduction

Pasture establishment is an expensive venture, and it is important to get the forage growing as quickly and vigorously as possible. In addition to good soil conditions, weed management is necessary for encouraging rapid forage growth. This publication will detail techniques for chemical weed control prior to and during pasture establishment.

The soil is full of weed seeds, which are commonly referred to as a soil seed bank. In pastures in need of renovation, it can be expected that weed control during and after pasture establishment will be necessary. This is true even for pastures that were relatively weed-free prior to renovation.

The first step in pasture renovation should include removing the existing vegetation. In most cases, 3 to 4 qt/acre of glyphosate will kill all living plant material, except for woody species. For some species, such as palmetto, more drastic measures are necessary. Once the plant material is dead, it will be necessary to till the pasture repeatedly, first with a moldboard plow, followed by repeated disking and/or rotovating. Repeated tillage is necessary to prepare a clean, weed-free seed bed prior to planting. If tillage applications are spaced 2 to 3 weeks apart, many weeds will germinate from seed, then be destroyed by subsequent tillage operations. This repeated tillage will help to deplete the soil seed bank.

The next step entails planting the desired forage. The University of Florida has detailed instructions for establishing forage grasses. See EDIS publication SS-AGR-161 entitled Forage Planting and Establishment Methods or consult your county agent for such recommendations.

Most weeds will emerge shortly after the grass has been planted. Therefore, time is of the essence for weed control operations. In most cases, sedges tend to be the most problematic, but broadleaf weeds also can quickly become established.

The following will outline the best weed control strategies for each pasture grass.

Bahiagrass (Argentine, Pensacola, Tifton-9, etc.)

Herbicides should not be applied to young bahiagrass seedlings. Apply herbicides only after bahiagrass has at least 6 inches of growth. Repeated mowing is the only option for suppressing weeds during bahiagrass establishment.
Bermudagrass (Florakirk, Jiggs, Tifton-85)

Apply 2 pt/acre of WeedMaster or any other product containing 2,4-D + dicamba 7-10 days after planting. Diuron is another herbicide that is useful for controlling crabgrass and other weeds, but sprigs must be planted 2 inches deep. Apply Diuron at 2 quarts/acre. Do not apply Diuron if you are planting tops and crimping material into the soil as it will cause severe injury. Outrider (sulfosulfuron) herbicide may be applied at 1.33 oz per acre no earlier than 4 weeks after planting.

Stargrass (Florico, Florona, Okeechobee, Ona)

Apply 2 pt/acre of WeedMaster or any other product containing 2,4-D + dicamba 7-10 days after planting. Alternatively, apply 0.78 lb 2,4-D with 0.22 lb of dicamba. Outrider (sulfosulfuron) herbicide may be applied at 1.33 oz per acre no earlier than 4 weeks after planting.

Limpograss (Floralta)

Apply 0.75 lb/acre of dicamba 7-10 days after planting. There are several dicamba-containing products. Outrider (sulfosulfuron) herbicide may be applied at 1.33 oz per acre no earlier than 4 weeks after planting. Limpograss is sensitive to 2,4-D applications, and has been shown to kill limpograss when applied soon after planting.

Conclusion

In all cases, it is best to apply herbicides within the 7 to 10 day window after planting. If herbicides are applied within this time frame, pastures will become established much quicker than without herbicide applications. If this window of opportunity is missed, Outrider at 1.33 oz per acre, plus 2,4-D + dicamba at the above rates should provide excellent weed control. Do not use Outrider on seedling bahiagrass, or complete kill will be observed; it is safe on established bahiagrass.