

Grassbur

IDENTIFICATION AND MANAGEMENT IN PASTURES

Scott A. Nolte, Ph.D. - Assistant Professor & Extension Weed Specialist



following spring. These plants might be more difficult to eradicate, since they have already developed a substantial root system the previous year. Whenever you have a weak stand of annual or perennial grass forage, grassbur will take advantage of this space and flourish. Therefore, one of the best cultural control measures is to keep your forage grass stands dense and healthy with proper management.

The most important consideration for control is recognition of it in the early stages of growth. The leaves on young seedling plants are usually hairless, while the sheaths surrounding the stem may have hairs along the margins. The sheaths will generally become pubescent (with hairs) as the plant matures. A narrow-fringed membranous ligule is present with hairs on the fringe. The stems are somewhat flattened and often purplish colored at the base. Tillers are

Grassbur (field sandbur, sandbur, grass bur, sticker weed, etc.) is a troublesome, nasty grass weed species that affects desirable grass forage quantity and quality. Although young plants are often utilized as a grazing forage, seed capsules can penetrate tissues of animals causing pain and sometimes infection. More importantly, it has a negative effect on hay quality and substantially reduces forage value. There are many different grass bur species in Texas, although one of the more common is field sandbur, *Cenchrus spinifex* (formerly *Cenchrus incertus*). Regardless, most are easily recognized in the mature stage of growth when the pernicious seed heads become apparent. What



you may interpret as the seed is a seed “capsule” that usually contains from 1 to 3 seeds. This capsule provides a nice environment for the seed to soak up moisture from the soil and hold it until the seed has been provided

the other stimulants (warm temperatures, light, etc.) necessary for germination. This is also what makes it more survivable than some other grass species in sandy soils that are more prone to dry out. We often think of the grassbur species as being warm season annual plants. However, many of these are classified as perennials, which can survive from one year to the next. Although foliage may get “burned” off by freezing temperatures in the fall or winter, sometimes these plants may survive and come back from the roots the



produced on the plants early, which add to the competitiveness of this weed. When you are doubtful about identification, you can dig up young plants and you will often find the bur attached to the seedling.

There are two approaches to control grassbur with herbicides. One is to use a preemergent herbicide. Prowl® H2O and other formulations of pendimethalin can be applied preemergence to grassbur on dormant bermudagrass at rates from 1.1 to 4.2 quarts per acre. Good results can be obtained from pendimethalin if it is properly incorporated by at least 0.5” to 0.75” of rainfall or irrigation within 7 days of application.



The second approach is to use one of three products that are labeled for postemergence control, meaning the product must be sprayed onto an emerged grassbur plant. One product is Pastora® and it must be applied to small grassbur plants (1.5 inches tall or across) at rates of 1.0 to 1.5 oz per acre. It is only labeled for use on bermudagrass, so applying it on any other type of pasture or hayfield is illegal and could cause severe injury. There are no grazing or haying restrictions associated with the use of Pastora®.

Another postemergence treatment is Roundup PowerMax®, which is labeled for use on bermudagrass hayfields immediately after the first hay cutting at a rate of 11 ounces per acre. This application also will control many annual grasses other than grassbur. Some stunting of perennial grasses will occur if broadcast application is made when plants are not dormant. Higher application rates may be used for hard-to-control weeds; however, higher rates will cause stand reduction in the forage species. It is important to treat as soon as possible after the first hay cutting for two reasons. First, there will be less crop injury since there will be less bermudagrass leaf area to take up the herbicide. Second, the product must contact the grassbur plants while they are small; this is less likely to happen if the bermudagrass has regrown and is covering the grassbur. A maximum of 2 quarts per acre per year can be applied with no grazing restrictions.

The third postemergence product should be used with caution. The active ingredient, imazapic, sold under the trade names such as Plateau® and Impose®, will stunt bermudagrass growth for a period of at least 30 days. Some varieties, such as Jiggs and World Feeder, are more prone to injury than others. It is labeled for use in most perennial grass species, including native range. It is an excellent herbicide, with both preemergent and postemergent activity and is only recommended where controlling grassbur

is more important than forage growth. It is relatively inexpensive and has a wide weed control spectrum. There are no grazing restrictions, but a seven-day haying restriction applies when using imazapic.

Always refer to product labels for specific information on recommended use patterns and other details. Contact your county AgriLife Extension Agent for current information on control. You must keep hay fields scouted in the fall for grassbur presence so you are able to identify those areas



where you might apply a preemergence, preventative herbicide as described above, in late winter or early spring. In the spring and throughout the summer, you should again scout



the fields for early detection of grassbur and get postemergence treatments applied in a timely manner. No matter what the case, if you have had grassbur in the past, it is likely you will have it for years to come. Again, proper forage management will be the first step in grassbur control.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M AgriLife Extension Service is implied.

Texas A&M AgriLife Extension is an equal opportunity employer and program provider. The Texas A&M University System, U.S. Department of Agriculture, and the county commissioners Courts of Texas cooperating.