Pests

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Pests are organisms that humans perceive as being harmful, destructive, or annoying. These organisms occur naturally in nature and may be both beneficial and harmful, depending on human values. For instance, a person may live a productive and beneficial life but may be considered a pest because of their unwanted interference in other people's business. Somehow, we manage to put up with these people because they often are useful and not particularly harmful. Likewise, deer are highly desirable to recreational hunters but can be highly destructive pests on farms where they consume various crops and substantial amounts of high-quality forage in pastures.

In pastures or hayfields there are many weed, disease, insect, or nematode pests that may cause minor losses but are not worth the expense of trying to control them. However, in some cases, serious losses can result and an effort must be taken to reduce these pests. Unlike various grain, oilseed, or fiber crops, labeled pesticides are often not available for forage at costs that are economically feasible or are safe for livestock use. Thus, management strategies should be devised to reduce forage losses with only limited inputs of pesticides.

Evaluating the problems and dealing with it

Weeds

Weeds are a normal component of most pastures and hayfields. Some weeds such as crabgrass are nutritious and highly palatable to livestock so it makes no sense to waste money eradicating them. In other cases, unpalatable weeds such as horsenettle, thistles, curly dock, blackberry, dogfennel, and smutgrass are rejected by grazing cattle and the weed population increases in the pasture. A rotational grazing system will often result in less of these weed pests, since animals concentrated on a small area during each rotation and are more likely to eat them. Mowing at the right time may prevent seed production on some weeds and reduce the problem. Fire can also be a useful tool in killing seedlings of many woody weed species in bermudagrass pastures. When unpalatable weed problems develop, they should be dealt with promptly by application of a recommended herbicide at the proper time. No general recommendations can be given as it depends on the weed and the kind of grass or clover in the pasture or hayfield. A forage weed management publication is available from your county agent to assist cattle producers.

Insects

Insect attacks generally do not cause stand losses but can reduce forage yield and quality. Serious insect problems can occur on grasses in late summer when armyworms may consume the leaf tissue, leaving only stems. The damage can occur rapidly and a suitable insecticide must be applied in timely fashion to kill these pests. Hybrid bermudagrass fields can be damaged by spittlebugs. One of the most dependable ways to control this pest is by burning bermudagrass fields during late winter or very early spring, killing spittlebug eggs and larvae. This works well with Coastal and Tifton 44 bermudagrass varieties as they have heavy rhizomes (underground runners) and are undamaged by fire. However, Tifton 78 and 85 varieties have limited rhizomes so their stolons (above ground runners) can be damaged by fire. For these grasses, it is best to use a headfire which moves quickly across a field with the wind, as compared to a backfire which burns slower and hotter. Grasshopper outbreaks can cause severe damage at times and may necessitate the use of a bait.

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Various insects such as leaf hoppers and aphids can damage clovers. Application of an approved insecticide to a clover or alfalfa hayfield when insect numbers are beginning to increase can be useful while later application may be a waste of money as the damage is already done. Insecticide treatment of alfalfa hayfields in late winter is essential for control of alfalfa weevil. Alfalfa pastures that have been grazed off in autumn have inadequate sites for overwintering of this pest so may not need any insecticide treatment. Fungicide application of a mixed clover-grass pasture is not likely to pay off.

Diseases

Disease control in forages with fungicide application is generally not practical. Some grasses such as rescuegrass and Matua prariegrass can be severely infected with mildew in late winter or early spring. Common bermudagrass can be badly damaged by leafspot disease in late summer of some years but stands are not affected. Some annual ryegrass varieties can be severely damaged by crown rust in late winter. Alfalfa and red clover that have been no-tilled planted into grass sods in autumn may have stands severely reduced by crown and stem rot the following spring. A number of root rots and virus diseases affect red and white clovers, reducing vigor and shortening stand life.

The only practical way to reduce forage disease losses is to plant varieties that have improved disease resistance. One of the contributing factors to the great success of Coastal bermudagrass is its superior disease resistance as compared to common bermudagrass. Likewise, other Tifton-bred bermudagrass and bahiagrass varieties have excellent disease resistance. Rust-resistant annual ryegrass varieties are available. Most tall fescue varieties are fairly disease resistant for our conditions. Unfortunately, ladino (white) and red clover varieties currently available have a number of disease problems that shorten stand life in Georgia so the only solution is to broadcast seed on grass pastures every year or two. Crown and stem rot losses can be greatly reduced in clover and alfalfa by planting during winter instead of autumn. No resistant arrowleaf clover varieties are available to reduce stand and yield losses from a fungus root disease.

Soil nematodes

Soil nematodes are an important factor in reducing vigor and stands of white and red clovers, orchardgrass, and endophyte-free tall fescue. No soil nematode control treatment is practical for forages. Improved resistance is needed in varieties of these forage species, Hybrid bermudagrasses and bahiagrass have high resistance to these pests.

Conclusion

There are no easy ways to spray and eliminate pests. Pests will always be around to pester cattle producers. Several suggestions can be made on dealing with these pests. Planting well adapted grasses and clovers of the most pest-resistant varieties available is the first step. Fertilize them adequately so they are vigorous and competitive with weeds. Use sensible grazing management to favor the forage plants and not the weeds. When weeds are a problem, apply the correct herbicide at the proper rate and time.