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### **It May Not Be What You Think It Is – Broomsedge Bluestem**

If you noted the increasing presence of a dull orange grass standing above the canopy of your cool season forage as you fertilized this spring, you may have at first wondered why native grass was invading. If you got out and looked, you probably found it to be something much different – Broomsedge bluestem.

Stress on our pastures and hay fields over the years have resulted in 'open space' in grass stands. In those open spaces come 'invaders', with Broomsedge often the most noticeable. Before long, it can become a real problem! What can you do?

Broomsedge tends to infest fields with lower fertility or that have been heavily grazed. Its low Phosphorous (P) and lime requirements aid in its survival in low fertility soils (approximately 60% of our soil tests show low P levels). It tends to be unpalatable to livestock and since it's not consumed, it expands! It may even produce allelopathic chemicals that inhibit other plants, including nitrogen fixing bacteria, making clover establishment a challenge.

Mowing doesn't seem to slow its spread. Burning has some merit, but has to be done in the fall when the damage to our cool season grasses may be greater than the benefit. Herbicides like glyphosate work – but they are non-selective, meaning you can't want to get any on the desired grasses. You MAY have SOME success if you could use a wiper or roller – but they've been inconsistent, too.

Fertility is the key. Since most of our fertilizer is already on, now is the time to start planning to implement a fertilizer based control program this coming fall. Start with a soil test following haying or in later summer, then develop a fertility program based on those results. Work in both Missouri and Oklahoma suggests that a balanced fertility program (pH and N/P/K) can change the species composition back to a predominance of desirable species in as few as two years. It won't be an overnight fix, but if you don't start soon, Broomsedge will be your forage of default – and its value for livestock production is pretty well nonexistent!

### **Adding Organic Matter in the Spring**

Organic matter is a good way to improve garden soil as it improves a heavy soil by bettering tilth, aeration and how quickly the soil absorbs water. However, organic matter added in the spring should be well decomposed and finely shredded/ground. Manures and compost should have a good earthy smell without a hint of ammonia. Add a 2-inch layer of organic matter to the surface of the soil and work the materials into the soil thoroughly. Be sure soils are dry enough to work before tilling as wet soils will produce clods.

To determine if a soil is too wet to work, grab a handful and squeeze. If water comes out, it is much too wet. Even if no water drips out, it still may not be dry enough to work. Push a finger into the soil you squeezed. If it crumbles, it is dry enough, but if your finger just leaves an indentation, more time is needed. Be sure to take your handfuls of soil from the depth you plan to work the soil because deeper soils may contain more moisture than the surface.