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# How to Read a Seed Tag

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I believe that pasture establishment failures due to poor quality seed are rare in Florida. Seed of most grasses and legumes that we use are produced locally by reputable seedsmen who watch over the quality of their product. That's not to say that cattlemen shouldn't be alert and wise shoppers for seed, basing their decisions on information printed on the seed tag and on cost per pound. After all, business is business, and we want the most for our money. Here are some things to consider which may help you make a good decisions.

Each bag of seed marketed will have a tag attached or accompanied with a sheet containing similar information. All tags disclose the kind of seed (species), container weight, and provide information about seed quality on a weight basis, which is how you buy seed and determine sowing rates. Blue tags indicate "certified" seed, which means that the genetic purity of the variety has been determined by Florida's official certification agency, and that the seed conforms to the higher standards for certified seed of that crop. Florida cattlemen will only see certified tags on Tifton-9 bahiagrass (if they requested certified Tifton-9), varieties of small grains, ryegrasses, and clovers. Most of our seed is not certified, but this does not mean that it is not high quality. These are things to look for on the tag:

**Germination (or germ)** is the percentage of seed capable of producing healthy plants when placed in a suitable environment. Seedsmen send samples of their seed to commercial laboratories who make this determination. During a specified test period, seed that has sprouted is counted (call this readily germinable seed) and remaining seed is examined to determine if it is good. Non-germinated seed that has not spoiled is considered "dormant" in the case of grasses (percentage dormant seed is found on tags of

Pensacola but not Argentine bahiagrass) or "hard" in the case of legumes (aeschynomene, Savanna stylo, etc.). Total germination is the sum of readily germinable seed plus dormant or hard seed. Sometimes the tag will provide germination according to tetrazolium (or TZ) test. This is a chemical test that provides an estimate of viable seed, and it will tell you nothing about readily germinable seed. The date of the germination test is given, and it should be within 7 months of the date of sale. Germination of some seed, like Pensacola bahiagrass, can improve (up to a point) with time, while others (like alyceclover and Suerte) decrease rapidly after a year of high humidity in warehouse storage.

**Pure seed** is the percentage of the variety or species you are purchasing. **Other crop seed** is that from some other species. **Weed seed** and **noxious weed seed** are two different categories, the latter referring to very harmful weeds, such as tropical soda apple. **Inert matter** is the percentage of sticks, stems, broken seed, and sand that is mixed with seed.

Now, let's apply the information on the tag. One of the most useful criterion is pure live seed (PLS), which is purity x germination / 100. Pensacola bahiagrass with 98% purity and 75% total germination has 73.5% PLS. If that seed actually costs $1.30/lb, its cost is $1.77/lb for PLS. Sowing 10 lb/A PLS (13.6 lb/A actual) equals $17.68/A. To get the most for your money, repeat this calculation using different purities, germination percentages and $/lb and find the lowest $/A. I want the highest percentage of readily germinable seed I can get because I will time my seeding so that my crop has maximum advantage to quickly and uniformly germinate, grow, and beat the competition. I'll pick a sowing rate for readily germinable seed (5-8 lb/A for bahiagrass is good) and calculate $/A on that basis.