GRAZING

Pasture Planting & Seed Check

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I nput costs of fuel, seed, and fertilizers have gone up dramatically. These cost increases, coupled with recent unusual weather, should prompt a detailed review of the seed check (tag) whether you are partially or totally renovating your pastures.

Important to planting and cost savings is knowing how much pure live seed (PLS) you have. The quantity of utilizable seed in a bag, also known as PLS, depends on two main components: seed purity and germination percentage. Purity refers to the seed of the desired pasture species in your bag as opposed to having other seed and/ or foreign matter such as weeds.

Most grass seeds in the bag will have components that won't separate cleanly from flowering parts due to their light weight, size, and unusual shapes. In some cases, unwanted foreign material may contaminate seed or contaminated seeds may already be in the bag. Additionally, the germination of the pasture seed of interest may not be 100% but lower (e.g., 60%). When comparing seed cost, it is very important to calculate price per pound of PLS, not just the bulk seed cost. This is important since no matter how much the seed is advertised as inexpensive, in the long run you could end up paying significantly more if the seed has impurities or low germination rates. A poor stand could be just the beginning of your problems.

Let's assume we have three different marketers quoting the same pasture species (Table 1). Company A is the more expensive (\$1.50/lb), and Company C seems to be the most inexpensive (\$1.20/lb). However, those prices are based on cost per pound as is. What happens when we calculate the PLS in each bag and associated costs? When recalculating costs based on a PLS basis, you can see the cheap seed from Marketer C is more expensive than the others.

Likewise, based on the adjustment for PLS (Table 2), you will need almost twice as much seed from Marketer

Table 1. Comparing PLS and costs of the same pasture seed from different marketers.

Seed Bag Marketer	% Germination	% Pure Seed	% PLS	Cost/lb As Is		Cost/lb PLS
A	80	99	79.2	\$1.50	\$1.50/79%= 1.50/0.79	\$1.90
В	79	90	71.1	\$1.40	\$1.40/71%= 1.40/0.71	\$1.97
C	75	70	52.5	\$1.20	\$1.20/53%= 1.20/0.53	\$2.26

Table 2. Adjust amount of seed required to meet actual seeding rate recommendation using PLS%.

Seed Bag Marketer	% PLS	Seeding Rate (lbs/ac)	Adjusted Seeding Rate to Provide 12 lbs PLS/ac	Adjusted Seeding Rate to Meet 12 lbs PLS
Α	79.2	12	12 lbs/79% = 12 lbs/0.79	15 lbs/ac
В	71.1	12	12 lbs/71% = 12 lbs/0.71	17 lbs/ac
C	52.5	12	12 lbs/53% = 12 lbs/0.53	23 lbs/ac

C to meet a recommended seeding rate of 12 lbs/ac. Marketers A and B show only 2 lbs/ac difference in seeding rate between each other and have much better purity/germination ratios, making them a better buy.

In addition to checking out the real cost of seed, make sure you obtain the right pasture stand density, which is reliant on how good the conditions are when seeding. If conditions are less than ideal, adjust your seeding rate higher to compensate for expected lower germination rates.

Before you seed your pastures, be sure you are using the right calculation for PLS given the high cost of seed, fuel, and fertilizer!