



# EVERYTHING YOU NEED TO KNOW TO BUY GOOD SEED IS ON THE LABEL

*By Sandra Frost*

**A**re you considering reseeding a pasture, planting a lawn, or a crop?

The label or tag that comes with a bag of turfgrass or crop seed contains a great deal of information to help you select quality seed that will germinate, grow, and meet your goals. Wyoming consumers can purchase seed and know exactly what they are buying as a result of U.S. and state seed laws. The label contains information on cultivar, purity, germination percentage, crop seed, weed seed, inert material, noxious weeds, net weight, lot number, and date tested. The data on the label comes from samples tested in independent laboratories such as the Wyoming Seed Analysis Laboratory at the Powell Research and Extension Center.

- **Cultivar** – crop variety/product name
- **Pure seed** – percent by weight of the particular cultivar seed in the bag. Higher percentages are better.
- **Crop** – this number represents “other” seed that is mixed with the desired cultivar. High-quality turfgrass seed should contain no other crop seed – or at most 1 percent.
- **Germination** – the percent of pure seed that germinates under ideal conditions. Higher percentages are better. “Germination” means the emergence and development from the seed embryo of essential structures indicative of the ability to produce a normal plant under favorable conditions.

- **Inert matter** – percent by weight of material other than seed, such as broken bits, sterile florets, chaff, sand, soil, or organic matter that will not grow.
- **Weed seed** – percent by weight of weed seed. Ideally, seed should not contain any weed seed; however, a small percentage may be present.
- **Noxious weeds** – these are weeds declared to be noxious by states and/or counties. It is illegal to sell seed that contains noxious weeds. If restricted or regulated noxious weeds are present, they must be listed.
- **Address** of the company providing the grass seed
- **Origin** – state in which the grass seed was grown
- **Lot number** – each lot of grass seed is uniquely numbered. Seed can be traced back to its origin.
- **Test date** – the actual month and year this lot of grass seed was tested for germination

How does all this information help a consumer?

Seed varies from lot to lot. Germination rates, purity, and inert material content may be different from bag to bag. Seeding rates are calculated on a pure live seed (PLS) basis, which is the result of taking into account germination and purity.

If seed has been treated with pesticides, or bacterial or fungal inoculants, the label will contain warnings such as “Not for human or animal consumption.”

One last interesting point is a requirement by Wyoming seed law

KWIK-GRO GRASS SEED			
Turf Type Fescue			
Pure Seed	Variety/Kind	Origin	Germination
94.6%	Covar Fescue	Wyoming	88%
Other Ingredients			
0.15%	Crop		
0.04%	Weed seed		
5.21%	Inert material		
Noxious Weeds: None Found			
Wyoming Farm 123 Burnt Creek Road Powell, WY 82435		Lot No. W39-456-1234C Test Date: Jan 2013 Net Wt. 10 lbs.	



**Example:**

You have a 10-pound bag of seed. Planting recommendations are for 5 lbs of pure live seed (PLS – seed that will germinate) per 1,000 square feet. Pure seed is 94.6% and germination is 88%. Do you have enough seed? The goal is to calculate how many pounds of PLS are in that 10 lb bag. You may need more than one bag to cover your square footage. Calculating PLS also allows you to select the best buy in terms of pounds of PLS per dollar spent.

To calculate PLS, multiply the percent germination by the percent purity. In the example above it would be:

$$0.88 \times .946 = .832 \text{ or } 83.2\% \text{ PLS in the 10-lb bag.}$$

$$10 \text{ lbs.} \times 0.832 = 8.32 \text{ lbs PLS in the bag}$$

To find how much you need from the original bag, you will calculate the ratio 8.32 lbs PLS/10 pounds = 5 lbs PLS/**X** lbs. **X**=6, so six pounds of the original bag of seed are needed for 1,000 square feet.



that lawn grass seed mixtures offered for sale in Wyoming must contain at least 50 percent of perennial, permanent-type lawn grass seed adapted to local growing conditions, such as Kentucky bluegrass (*Poa pratensis*),

bent grass (*Agrostis* species), or fescue (*Festuca* species). This provision ensures that 50 percent of the mixture is a cool-season grass and most likely to succeed in our region.

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