

How to Read a Seed Tag

By Dr. Leah Brillman — Seed Research of Oregon

By law, a seed tag or label is required for every bag of turfgrass seed sold in the United States. This label provides valuable information that consumers can use to compare seed quality. Components of a typical turfgrass seed label are described in this document.

1. **Kind and variety.** Commonly accepted name (e.g., creeping bentgrass, Brighton).
2. **Lot number.** The lot number or other lot identification must correspond to the lot number on the name (certification) tag in a two-tag system.
3. **Pure seed.** Percentage of the variety or varieties by weight as determined by laboratory analysis on a representative sample of the lot. A lot is a defined quantity of seed that is handled so that a sample can represent the whole lot. The state of Oregon limits lot sizes to 55,000 pounds, but many other states have no limit. A very small quantity of seed is tested to determine the purity of a lot of seed (for example, 0.25 grams for bentgrasses). A mixture of more than one variety must have the percentage purity and germination of each variety stated.
4. **Crop seed.** Percentage by weight of other agricultural seeds. These seeds can represent more of a problem than weeds because they can include orchardgrass, tall fescue, ryegrass, bluegrass and bentgrass.
5. **Inert matter.** Percentage by weight of chaff, dust, soil and stems.
6. **Weed seed.** Percentage by weight of all weed seeds present.
7. **Noxious weeds.** Name and rate of occurrence (number per pound) of each kind of prohibited and restricted noxious weed seed present. The species on this list vary from state to state. Many companies run "All States Noxious Tests" on their seed. Some states list "Undesirable Grass Seeds" (UGS), which can be tested for. These additional tests are usually run on larger sample sizes.
8. **Origin.** The state or foreign country where the seed originates; if the origin is unknown, the label will state "origin unknown."
9. **Germination.** The percentage of seeds germinating under ideal laboratory conditions.
10. **Test date.** Calendar month and year the germination test was completed
11. **Manufacturer's code.** Often a distributor may be listed as the seller. The manufacturer code traces back to the seed company so that federal seed officials can identify the original manufacturer. The manufacturer's code on this label is AMS 642.
12. **Name and address** of the person or firm who labeled the seed, or who sells, offers or exposes the seed for sale within the state.

1. **Variety: Brighton**
Kind: Creeping Bentgrass
2. **Lot Number: S05-2355**
3. **Pure Seed: 99.33%**
4. **Crop Seed: 00.00%**
5. **Inert Matter: 00.67%**
6. **Weed Seed: 00.00%**
7. **Noxious Weeds: Not Found**
8. **Origin: OR**
9. **Germination: 94%**
10. **Test Date: 12/08**
11. **AMS 642**
12. **Seed Research of Oregon**
27630 Llewellyn Road
Corvallis, OR 97333

The information on the seed label makes comparisons between lots easier. For example, the information can be used to calculate the percentage of pure live seed (PLS), which can be used to determine the actual cost per pound of PLS or how many pounds of seed are required for a desired seeding rate. Multiplying %Pure Seed by %Germination and then dividing by 100 gives %PLS.

$$(99.27 \times 94) \div 100 = 93.31\% \text{ PLS}$$

Dividing the cost per pound of seed by the percentage of PLS and then multiplying by 100 yields the actual cost per pound of pure live seed.

$$\$7.00 \div 93.31 \times 100 = \$ 7.50/\text{pound PLS}$$