

A Seed is Not a Seed

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Whether it be for overseeding an athletic field, renovating a golf course fairway, or establishing a new lawn, seed is one of the most important purchases the turfgrass manager will ever make. To put it plain and simple: What you plant is what you're stuck with; and correcting the mistake of purchasing poor quality seed may be time consuming and very costly.

The seed market is literally flooded with seed of varying degrees of quality. It is often very tempting for the turfgrass manager to purchase seed of questionable quality to save a few dollars. But when one considers the longevity of the area established, and the headaches saved, the investment of high quality seed is really quite small. After you have decided which species and cultivars to plant, how do you know that the seed you buy is high quality?

The Seed Label

Many years ago the United States Department of Agriculture set standards that the seed industry must meet in order to sell seed. Later on, laws were written that clearly state what specific information about the seed should be on the label. Figure 1 shows an example of a turfgrass seed label.

The principal factors influencing seed quality are purity and germination. Purity is the percent, by weight, of pure seed of an identified species and cultivar present in that lot of seed. For example, 25.3% of the sample mix in Figure 1 is Adelphi Kentucky bluegrass.

While purity is an important number on the label, it is an indication of quantity, not quality. When seed is purchased, not all of the seed is viable. There are some dead seeds. The listed germination represents the percent of pure seed that is alive, and will germinate under standard laboratory conditions. A germination test must be run for each species and cultivar in the blend or mixture. Since seed will lose its viability in time, the date of germination testing is listed on the label and should be noted. It is normally recommended that the test date should be no more than nine months prior to the date the seed is purchased.

In the seed production fields, it is difficult, if not impossible to keep those fields completely free of weeds. As a result, weed seeds are often harvested along with the grass seed. After harvest, it is also difficult to clean all the chaff, stems, and leaves out of the seed. Therefore, a certain percentage of any seed blend or mix will contain weed seed, crop seed, and inert matter. The percent of each must be stated on the label.

Weed seed refers to undesirable plant species not normally grown for profit, such as chickweed. The first impression one might get looking at the sample label is that the 0.5% is low and does not warrant concern. That may be true if the weed involved was a large-seeded weed species. However, if all the weed seed in that lot was chickweed, that 0.5% would represent several hundred thousand chickweed seeds spread on a 5,000 square foot lawn.

Crop seed includes plant species normally grown for profit such as tall fescue, brome grass, and others. Unfortunately, the consumer would not know which crop species are present, unless the total crop percentage is above 5%. Seed companies are then required to list the crop species by name. Seeding a Kentucky bluegrass blend contaminated with tall fescue could be disastrous. The crop seed is a "Pandora's Box" that should not be fooled with. Purchase seed that contains little, if any, crop seed.

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