

# THE SEED LABEL

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IN CONSIDERING expenditures for turf there is often less concern about the purchase of seed than any other cost. Whether planting new areas, or overseeding, it is well to be completely informed about the seed we place in the ground. Unfortunately, the seed label is taken at face value and appears to be simple and straight-forward. But, it implies many things and fails to clarify others. Anyone who encounters frequent planting situations should be familiar enough with the label to analyze all possible unseen consequences.

The most imposing figures on any label are the percentages of each seed variety. But, we must constantly remind ourselves that a label reading 50% Kentucky bluegrass and 50% Highland bentgrass is not going to grow into 50% Kentucky bluegrass and 50% Highland. The label merely states that 50% of the **weight** of a package is Kentucky bluegrass and the remaining 50% is Highland bent. For it takes 9,072,000 seeds of Highland bent to make a pound and only 2,177,280 seeds of Kentucky bluegrass. Thus, this package which seems to be an apparent 50-50 mixture actually amounts to 81% Highland bentgrass and 19% Kentucky bluegrass.

To begin with, a mixture of 80% Kentucky bluegrass and 20% Highland bent is not compatible, but even if the buyer were aware he might consider the bent to be in modest, insignificant proportion. In reality this man will plant 1,814,400 bentgrass seeds and 1,714,824 Kentucky bluegrass seeds. The great variation in seed count per pound graphically illustrates why we must look beyond the percentages on the seed label. Percentages merely indi-

cate the weight of each variety in the container. What we must learn, or have easy reference to, is the number of seeds in a pound of each variety.

There are other figures on the seed label which appear insignificant, but require full understanding. For instance, **purity** is an indication of quantity and not the quality of a given variety. Even though seeds are pure, not all are capable of germination and growth.

Another seed label term is **germination**. This is the percentage of pure seed that is capable of beginning growth within a prescribed period of time. Unfortunately, not all seeds have the same strength, the same rate of growth, or the same survival rate. So, the percentage of germination merely indicates seeds that will start growth and not necessarily those that will end up as turf. To determine how many pure seeds will germinate, multiply the percentage of purity by the germination percentage. Example: the label says the purity of Kentucky bluegrass is 90%, the germination 80%. By multiplying the two we find that only 72% of the lot will be pure, live seeds. When we consider the mortality rate from various factors, the percentage of possible growing plants is again decreased.

Other terms that may appear on the seed label are **crop**, **weeds**, **noxious weeds** and **inert**. Each has a meaning, or significance, that will directly affect the quality of the final package. In most instances the percentages that represent these terms appear so trivial as to lack importance. But, they do play a major part in determining the final quality of mature turf.

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## LABEL (from page 16)

For instance, **crop** is an agricultural term and literally means any seed that may be grown as an agricultural crop. Crop could be composed of bentgrass seed, horse-radish, buckwheat or anything grown for crop value. If the crop in any package exceeds 5 percent by weight then it must be listed by name. However, if the crop in a particular lot of seed happened to be bentgrass, only two percent would total 181,000 seeds per each pound.

**Weeds** are listed as the percent by weight of all seeds in a package which have not been included as pure seed or crop. This is generally only a fraction of a percentage, but depending on the size of the seed may be of great significance. For instance, 0.1% Chickweed could amount to 560,000 plants in a 10,000 square feet area.

**Noxious weeds** vary from state to state and are listed as such because of their difficulty to control in agricultural practices. Thus, sheep sorrel which might be a plague to agriculture could be listed, while a real turf pest such as **Poa annual** might never be mentioned. So, noxious weeds are primarily harmful to farm crops and not to turf. However, there are exceptions.

**Inert** is the percent by weight of all material in the package that will not grow. It may be chaff, sawdust, corn cobs or any similar material that will give the package added size but not added weight. When the package lacks weight, sand can be added. These practices may imply dishonesty but they are entirely within legal limits.

The laws that guide seed labels are antiquated, misleading and deceptive. Fortunately, concerned companies have the integrity to sell seed with quality and merit. Unfortunately, some companies will sell inferior seed just to reap a few dollars more profit. For the seed buyer, it then becomes necessary to learn all that he can about seed labels. He must learn to recognize the areas of weakness and make certain that he plants exactly what he intended to purchase.

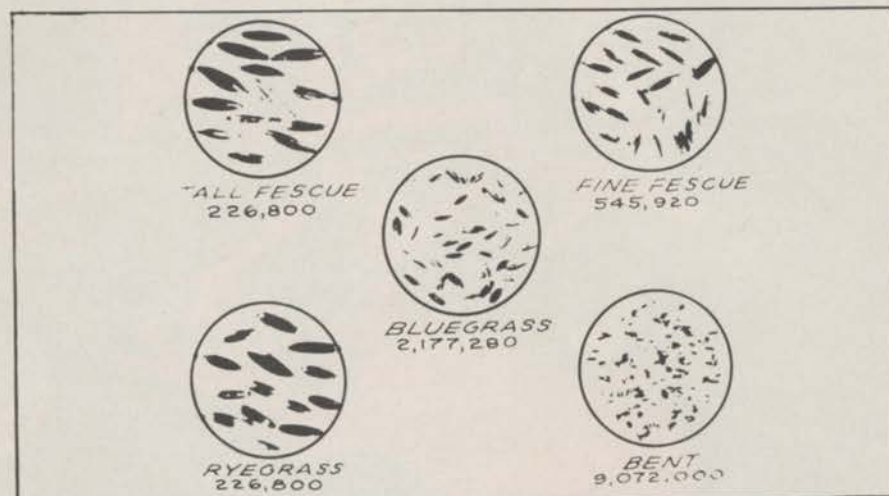
In reading a seed label we generally get the feeling that the seed was subjected to a thorough and absolute true test. But, in reality, the law states that only a one-gram sample

<b>\$3.95</b>	<b>NET WEIGHT 1 lb.</b>	<b>SPREADER SETTING</b>
<b>SEEDING RATE</b>		Golf Brand      Scotts
New Lawns .....	1 lb. per 300 Sq. Ft.	#7                #11
Established Lawns .....	1 lb. per 500 Sq. Ft.	#6                #10

### MIXTURE ANALYSIS—GOLF BRAND PREMIUM LAWN SEED

CONTENTS	PERCENT	GERM.
<b>FINE TEXTURED GRASSES:</b>		
Proto Kentucky Bluegrass .....	42.57	82%
Fylking Kentucky Bluegrass .....	30.70	80%
Newport Kentucky Bluegrass .....	25.54	80%
<b>COARSE KINDS: None Claimed</b>		
<b>OTHER INGREDIENTS:</b>		
Crop Seed .16%	Inert Matter .98%	Weeds .05%

*Unfortunately, the words on a seed label reveal and conceal many facts about the seed mixture. How would you rate the seed from the above label?*



*The importance of a seed count cannot be over-emphasized when analyzing a seed label.*

is required for testing regardless of whether the total lot is 5 pounds or 5,000 pounds. This is not to say that the test on this sample is not accurate — it is. However, if we visualize taking one tiny gram out of 5,000 pounds, it seems fair to predict that we may have missed many things. In this one gram we are supposed to determine pure seed, crop, and weeds for the entire lot of 5,000 pounds.

State and Federal agencies have recognized this discrepancy and insist that 25 grams be examined for certain noxious weeds. The weakness of this test is that it covers only "certain" noxious weeds that are listed, while unlisted weeds are ignored. Crop is also ignored simply because it is not a part of the test.

If there is an opportunity to purchase large amounts of seed at bargain prices, it is almost essential that the buyer insist on complete analysis and not just certification. It may be the best opportunity to destroy unwanted vegetation of the future.



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