

Buy Quality Grass Seed for Sod Production

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SELECTION and use of quality grass seed is basic to any sound, profitable sod production program. In fact, it is almost impossible to market a high quality sod without first starting with a good seed lot.

It doesn't seem logical or very businesslike to buy seed contaminated with weed seeds and then spend the next 18 to 24 months attempting to eradicate weeds, when the most economical control is to leave them at the market place. Don't buy trouble: avoid infested seed lots. The difference in cost between good and mediocre seed is much less than the cost of even the simplest weed control program.

What Is Quality Seed?

There is a great deal of disagreement as to what constitutes quality grass seed. I doubt seriously if any two sod producers would arrive at the same general standards or points to consider, much less explicit quality specifications.

I will not attempt to provide an ironclad, simple definition, but rather to list some specific points that in my opinion must be considered when one tries to define a quality seed lot.

Kind and variety of the seed is the first and most important point to be considered. The specific variety chosen must be able to produce the desired end product. Seed must be adapted to the area: it must be winter hardy, summer or heat hardy, resistant to common local diseases. If it is to be seeded as a mixture, it must be compatible with the other varieties used in the mixture. A poor choice here can make all other standards meaningless.

Author Day's recommendations were originally delivered to the Maryland Sod Conference, March 2, 1966, at the University of Maryland. While his comments are necessarily directed to sod producers in that state, they are relevant to other states as well.

The next several points to consider are mechanical, and concern what is actually in the bag. Almost every seed lot contains some other crop seeds, inert matter, and weed seeds. Seed is purchased mostly by weight, so that everything in the bag is paid for. But how much of this is pure seed of the grass variety desired, and how much fits into one of the other three categories?

Our Maryland seed inspection records indicate that some purchasers are buying as much as 31% inert matter, 7½% crop seed (orchardgrass, timothy, etc.), and over 2% weed seed (annual bluegrass). There is quite a wide range in purity available. The label tells the story, at least in part, and the buyer must determine from it whether the seed lot meets his standards.

Law Restricts Noxious Weeds

The labeled percentage by weight of weed seeds includes those of noxious weeds, if any are present. Taggers are required by Maryland law to list the rate of occurrence of all restricted noxious weed seeds, and are precluded from selling seed lots containing more than 16 such seeds per ounce.

A quality seed lot is free of all noxious weed seeds, and there is little excuse in this day and age for the sod grower to buy lots labeled to reflect their presence. There is plenty of good material available.

Some growers have, in the past, bought seed lots heavily infested with annual bluegrass (*Poa annua*), at rates up to and over 44,000 seeds per pound. Since July 1, 1966, however, lots containing over 16 *Poa annua*

seeds per ounce have been prohibited in Maryland. Lots containing any *Poa annua* must be labeled to reflect the rate of occurrence, and should be avoided by quality-conscious growers.

Consider Seed Germination

Once the purchaser knows what is in the container, it's important to ask how much of the *pure seed* will germinate. What percentage is capable of producing a normal, healthy seedling? In a quality lot, most will germinate. Many other lots produce very poor results. Selection depends on what germination rate the buyer will settle for: whether he expects 85%, 90%, 95% of seeds to germinate, or is satisfied with 60% or 70%.

Consider the date on the tag reflecting the germination test. Maryland law requires seed lots to be retested every nine months, but I suggest this is a long time to depend upon red fescues and some lots of bluegrasses. I would insist on a fairly recent test date.

Seed Buyer Beware

We have on the Maryland market, as in the states around us, all categories of seed offered for sale. It is a buyers-beware market. Without much effort, the buyer can obtain some of the unadapted, low-purity, low-germinating, high-weed-content seed lots that are generally available.

On the other hand, the buyer can obtain high quality grass seed by adopting a set of minimum standards and insisting upon that product. But, the standards adopted must be complete. It is unwise to base the decision on just a few of the quality factors. For example, one might insist on high purity and high germination and still obtain a seed lot full of *Poa annua*, chickweed, etc. Or, the seed lot could be free of weed

seed and still be infested with one or more of very undesirable crop seeds, such as orchardgrass, tall fescue, timothy, and bentgrass.

When buying bluegrass, one might end up with an excellent lot from the standpoint of mechanical purity, but it could be an undeclared variety, unsuited to local weather conditions. This problem is a big one today, and only emphasizes the care required to obtain quality seed.

It is interesting to note that the price is about the same for quality seed as it is for trash lots. Certainly, the price of seed cannot be used as a guideline when buying quality. Seedsmen attempting to market high-caliber seed find it very difficult to get a respectable profit margin, probably because too few of us know a quality lot when we see one.

Most of us are unwilling to pay for something we really don't understand or recognize. It is important to take the time to list the quality points sought in seed, and to purchase accordingly from a reliable dealer who handles a good line. Otherwise, one seed lot is like all others—just seed. Standards I would use if I were to buy seed for several grasses are given in Figure 1.

How To Use Specifications

Assuming the sod grower has developed a set of practical specifications he will be satisfied with, it remains to use them. They will not help in the file drawer. To be effective, they must become a part of the purchasing contract, and should appear on each purchase order, letter, or agreement for seed. I further suggest that a statement be included to the effect that "all seed lots failing to meet the above specifications will be unacceptable."

Here are several guidelines that can help to determine whether the desired quality product has been obtained: 1. Purchase from a reliable seed house and use a contract incorporating specifications. 2. Depend upon the label and hope it is accurate. 3. To be sure of seed

Figure 1. Sample Seed Specifications for Quality Bluegrass and Fescue

Type of Seed to Buy:	Control Program	
	Without Quality Control Program	With Quality Control Program
Merion Kentucky bluegrass	Buy Certified Seed	Buy seed of North Dakota, Iowa, Missouri, or Kentucky origin, or common Kentucky bluegrass seed of North-west origin*
Kentucky bluegrass	Buy Certified Seed	
Pennlawn red fescue	Buy Certified Seed	X
Kentucky 31 tall fescue	Buy Certified Seed	X

Purity and Germination Standards:

Seed	Minimum Purity	Maximum Crop Seed	Maximum Weed Seed	Noxious Weeds	Minimum Germ.
Bluegrass (N. central origin)	90.00	0.10	0.25	free	85.00
Bluegrass (N. west origin)	98.00	0.10	0.25	free	85.00
Bluegrass (Certified)	98.50	0.00	0.10	free	85.00
Red fescue	98.00	0.25	0.10	free	85.00
Red fescue (Certified)	98.50	0.10	0.05	free	85.00
Tall fescue	98.50	0.10	0.10	free	85.00
Tall fescue (Certified)	98.50	0.00	0.05	free	85.00

Additional Purity Specifications:

1. Bluegrass to be free of bentgrass and redtop, chickweed, *Poa trivialis*, *Poa annua*.
2. Red fescue to be free of tall fescue, orchardgrass, bentgrass.
3. Tall fescue to be free of orchardgrass, chess, cheat, dock.
(If ryegrass or redtop is added to a mix, minimum standards should be established for it, also, since either may carry objectionable crop and weed seeds).

Purchase Agreement to Include:

Acceptance of seed will be based on actual test results by a reputable seed laboratory. Payment to be made on all acceptable lots. Seed lots that fail to meet above minimum specifications will be returned to supplier without payment. Supplier to replace promptly any lot failing to meet these standards. (Many other specifications used by some consumers, such as size of container, delivery date, treatment, etc., may be included).

In Maryland: All seed containers to be completely and accurately labeled in accordance with provisions of the Maryland Seed Law.

* Common Kentucky bluegrass of broad genetic base, not to include improved varieties, which are frequently marketed as common Kentucky bluegrass.

quality, initiate a quality control program and have samples of the product tested by a reputable seed laboratory.

A good seedsman offering a high-caliber product will welcome a quality control program. Others stand to lose when their product is analyzed.

Some may consider a seed-buying program that involves specifications a bit cumbersome, involved, and time consuming. The alternative is to call a dealer, order the amount needed, and when it arrives, plant it. Under these conditions, the grower

must be prepared to accept the resulting sod without complaint. There's not much to be done about it except try another dealer.

When using specifications and a quality control program, the buyer can be assured of getting what he wants or returning it prior to paying the bill. And he will save many of the problems related to poor stands, weed control costs, and low quality turf. Perhaps the sod producer can afford to abuse some management practices, but he can't afford to abuse seed buying practices.