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UNIVERSITY OF IDAHO

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Let's Talk About Seed

By

HOWARD B. ROYLANCE



IDAHO CERTIFIED SEED

This container contains seed of the kind and variety indicated. This seed has met the standards for field inspection and grade requirements established for this kind and variety by the Idaho Crop Improvement Association, Inc. Certification is valid only if this tag is attached with official seal.

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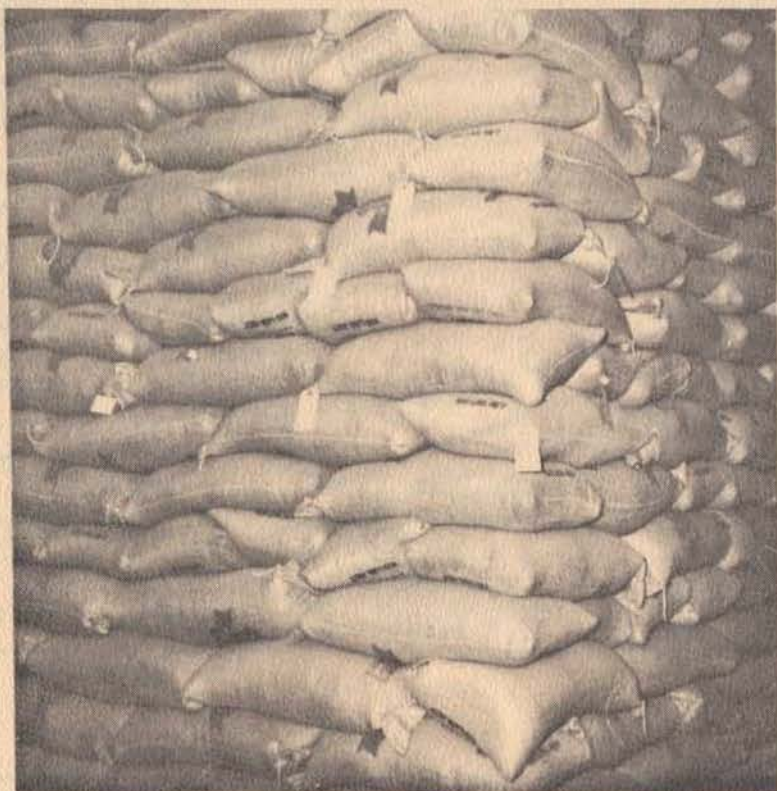
Howard B. Roylance
Extension Agronomist

Good seed is one of the most important items in producing a profitable crop.

The cost of seed is a small part of the total cost of production. Even so, some farmers are willing to take unnecessary risks in reduced income by planting seed of unknown or questionable quality.

The Idaho seed law requires that each container of agricultural seed offered for sale for sowing purposes must be labeled or tagged to show the germination and purity analysis. The law prohibits the sale of seed containing primary noxious weed seeds. It also limits the amount of weed seeds including secondary noxious weed seeds to one per cent by weight. Secondary noxious weed seeds must not exceed five per pound.

When buying seed be sure to read the analysis tag on the bag to see that you are getting the quality of seed you want. You can't tell good seed just by looking at it. You need to know its true variety, its germination and its purity. If you can't be bothered to read the analysis tag, look for the blue certified tag. This is seed that has passed field inspection for varietal purity by the Idaho Crop Improvement Association and has been laboratory tested. High germination and purity are automatically assured.



Certified seed, tagged and sealed, ready to plant.

Varietal Purity

New improved varieties are continually being developed. One variety may look much like another in general appearance but its performance may be quite different. Plant breeders have developed varieties which have better resistance to certain plant diseases. They have improved the strength of straw so that the crop will stand up better under higher rates of fertilization and they have increased the yield potential. As a result, older varieties which have been acceptable give way to new and improved varieties. The best way to obtain seed of a known variety is to buy seed which is tagged Idaho Certified Seed. It must have a **varietal** purity of 99.9%. This is the easiest and best way to know what you are buying.

Mechanical Purity

Mechanical purity refers to the pure seed, seed of other crops, weed seed and inert matter in seed. This is determined by trained seed analysts. Only pure seed has any real value. Seeds of other crops are of no value and may downgrade the harvested crop. Weed seeds cause serious problems. Inert matter which includes pieces of cob, cracked seed, dirt, etc., is useless in producing a crop.

Certified seed must meet certain minimum requirements of **mechanical** purity and germination. No weed seeds of any kind are permitted except for a trace of wild oats. Mechanical purity must be at least 98% and germination must be at least 85%. A summary of the purity and germination records in the Idaho State Seed Laboratory shows that dealers approved to clean certified seed are cleaning it even better than required by the standards. Most approved dealers use an indent cleaner in addition to a clipper cleaner.

These machines remove practically all the small, cracked and broken kernels, leaving only plump fully developed seeds which give high germination and strong seedlings.

Most lots of certified seed have a purity of 99% or better and germination of 90% or better. Certified seed is usually the cheapest to buy based on the pure live seed that is likely to grow.

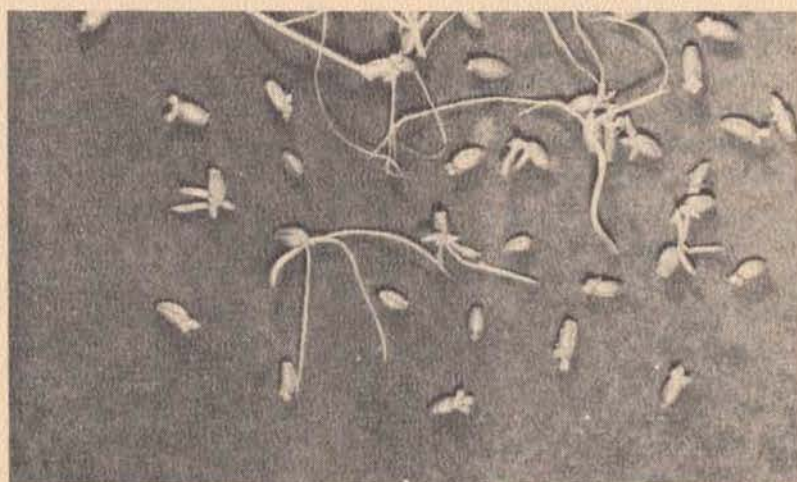
Seed Treatment

All small grain seed can have harmful seed-borne disease organisms.

Chemical materials can be applied to kill specific disease organisms which may be on the surface, such as stinking or common smut. They will also kill the spores of dwarf smut and help to prevent scattering them from one area to another. Seed treatment with mercurial compounds will assist in protecting the seed and seedlings during the early stages of growth from infection by organisms which cause seedling blight and root, crown and foot rot.



Laboratory tested—High germination and strong seedling vigor



This seed lacks germination and vigor.

Research in nearby states indicates that yields may be increased as much as 10% when seed wheat, barley and oats are treated, compared with non-treated seed. **Even seed of disease-resistant varieties should be treated.**

Many farmers do not have the time or interest to keep up with development of new crop varieties. There are specialists in every county who make it their business to know about these new improvements. A good source of information is your county agent or local seed dealer.

**TO BE SURE — PLANT CERTIFIED SEED
SEE YOUR SEED DEALER**

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