

Office of Indiana State Chemist and Seed Commissioner

Testing, Labeling, & Tolerances - A Guide to Maintaining Proper Records and Establishing Label Claims

Every seedsman is concerned about the quality of his seed before it leaves his warehouse destined for planting. Steps are taken to have proper tests performed on the seed to evaluate that quality so that the customer and the labeler are assured the product is labeled truthfully. It is the responsibility of the labeler of the seed to maintain adequate records to document label claims that are expressed to the customer.

Seed Testing:

Does seed have to be tested before being offered for sale?

Yes, seed laws require that seed be tested to document label guarantees. Section 4(h) of the Indiana Seed Law references testing as follows:

Section 4(h): "For each named agricultural seed (...the label will show...):

1. The percentage of germination, exclusive of hard seed.
2. The percentage of hard seeds, if present.
3. The calendar month and year the test was completed to determine such percentages."

Section 6(a)(1) of the law also references a "test" as follows:

Section 6(a)(1): "It is unlawful for any person to distribute agricultural or vegetable seeds with this state (1) unless the test to determine the percentage of germination required by sections four and five shall have been completed within a nine (9) month period, exclusive of the calendar month in which the test was completed immediately prior to distribution."

Some key points made by these sections of the law include (1) a test must be made to determine seed quality and to support label claims, (2) the test to rely on would be the most "recent" one made immediately prior to distribution, and (3) the test information is valid for a period of nine months.

Who must do the testing?

The law does not require that testing be done by any particular laboratory. It simply states that a test must be done. This can include tests performed by Indiana Crop Improvement Association, other commercial laboratories, the state laboratory, or an "in-house" laboratory maintained by the seedsman.

Should my records include the results of tests performed?

Yes, the records for each lot of seed sold must be maintained by the labeler of the seed. Complete records would include a copy of the label, all test reports obtained from either a commercial laboratory, or "in-house" laboratory to document the quality of the seed the label claims made. Records include several other things, and are highlighted in a separate memo available from the Office of Indiana State Seed Commissioner.

Establishing Label Claims - Without Utilizing Tolerances

The one major point to be made regarding the establishment of label claims is that the records for a given lot of seed must substantiate the claims (or guarantees) made on the label. The main principle of the Indiana

Seed Law is "truth-in-labeling." The label must contain truthful information relating to the identity and quality of the seed. Sometimes labelers are tempted to use what they perceive to be a "label tolerance" to establish their claims. As an example, the best test for a given lot of seed comes back at 86% germination. The germination claim is set at 90%, because the seedsman pre-labels all of his soybeans at 90% with or without knowing the results of the final testing. Is the product mislabeled? YES! Can the labeler justify the guarantee? NO! Can the labeler apply a "label tolerance" to justify the claim? NO! Why not?

Tolerances are utilized in seed testing to account for variability in sampling and testing procedures. They should be used only when comparing a "first" analysis with a "second" analysis to decide whether there is a real "deficiency." The "first" analysis is usually the claim on a seed label (that was based on real test results) as the "claim." The "second" analysis could be that of a regulatory laboratory, or other person interested in checking whether the lot of seed represented by the sample is of lower quality than the "first" analysis indicates. If an apparent deficiency exceeds the tolerance, the deficiency is considered real. Tolerances are established with a probability of error of 5% and are appropriate only for determining if real deficiencies exist between tests. When a labeler incorporates a tolerance to establish a label claim, he knowingly mislabels the product.

Does this mean I can't label my seed at the time of bagging, prior to receiving final test results?

No, it doesn't mean protocols have to change. A labeler certainly realizes that he takes his chances by labeling seed with "preestablished" claims prior to testing or to receiving test information. Sometimes viability is going to drop. It's never a "sure thing." If you operate under this type of system, you have to accept those chances and be willing to deal with them if they occur. If test information comes back and does not support the "preestablished" claims, the seed should be relabeled. There is no "tolerance" applied! Imagine trying to explain to a customer who purchased a lot of seed that didn't produce an acceptable stand. He complains to the seed commissioner, who requests to see your records for the lot. And, your records show that you labeled the seed with a tolerance above what you knew to be the true viability for the seed. Was it labeled truthfully? Make sure you've got some justification to back up guarantees made for the product.

Expressing the "date of test" on the label

Seed laws require the labeler to state the "date of test" on the label to indicate freshness of the seed. As referenced earlier in this guide, Section 4(h) of the Indiana Seed Law mandates the labeler to show "the calendar month and year" the test was completed to determine such percentages. Again, the "truthfulness" aspect comes into play with this type of declaration. That month and year should correspond to a test that was completed on the lot to determine quality, on which label claims were based. If the only test performed on the lot was done in November of 1995, it is a violation of this section to show a test date of January 1996. Let's uphold the principle of "truth-in-labeling" and make sure information provided is well documented!

Questions regarding the policies outlined in this guide are welcome and should be directed to:

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