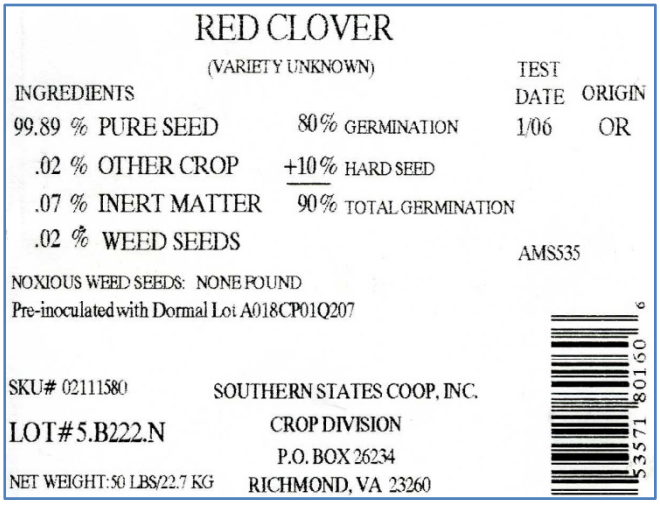
What is the purpose of the seed tag?

Seed lot quality is a primary consideration when planning a crop and purchasing seed. Purity and potential germination are important factors in seed lot quality that directly impact establishment and stand as well as the subsequent harvest. To ensure producers have access to accurate seed lot quality information, seed laws exist at the state and federal levels requiring that specific information be made readily available to the purchaser in the form of a seed label. A purchaser can evaluate the information on the tag to make purchasing decision.

Fig. 1. Example seed tag of an accurately labeled red clover seed lot offered for sale in Kentucky.


RED CLOVER

(VARIETY UNKNOWN)

INGREDIENTS | TEST DATE | ORIGIN

99.89 % PURE SEED — 80 % GERMINATION — 1/06 — OR

.02 % OTHER CROP — +10 % HARD SEED

.07 % INERT MATTER — 90 % TOTAL GERMINATION

.02 % WEED SEEDS — AMS535

NOXIOUS WEED SEEDS: NONE FOUND

Pre-inoculated with Dormal Lot A018CP01Q207

SKU# 02111580

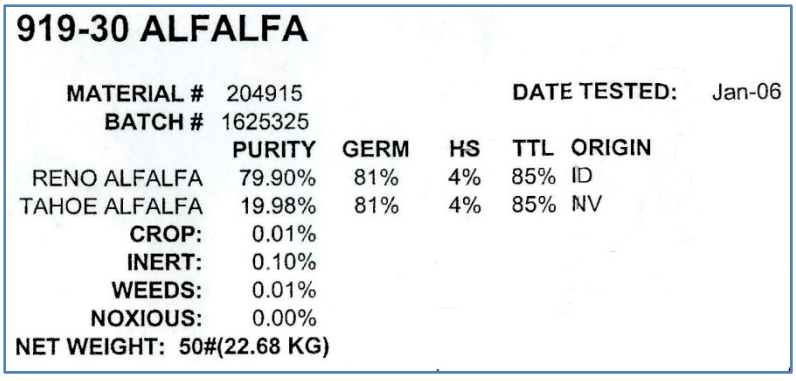
LOT# 5.B222.N

NET WEIGHT: 50 LBS/22.7 KG

SOUTHERN STATES COOP, INC.
CROP DIVISION
P.O. BOX 26234
RICHMOND, VA 23260

53571 80160 6

Fig. 2. Example of a seed tag with missing information offered for sale in Kentucky.


919-30 ALFALFA

MATERIAL # 204915 **DATE TESTED:** Jan-06

BATCH # 1625325

	PURITY	GERM	HS	TTL	ORIGIN
RENO ALFALFA	79.90%	81%	4%	85%	ID
TAHOE ALFALFA	19.98%	81%	4%	85%	NV
CROP:	0.01%				
INERT:	0.10%				
WEEDS:	0.01%				
NOXIOUS:	0.00%				

NET WEIGHT: 50#(22.68 KG)

What information is required on a label?

In Kentucky (and most states), Seed Kind, Variety, Lot Number, Seedsman, Origin, Test Date, Purity, Noxious Weeds, Germination, and Treatment Statement are required on the label. Each of these items provides valuable information to the purchaser.

Seed Kind refers to the crop seed in the bag. Seed kind choice will be depend on the site and intended use. Given the intentions, a mixture may be best.

Variety is a selection of a seed kind that has specific characteristics. In Kentucky, specialists perform field trials to determine which varieties perform best in our area. These suitable varieties are called 'adapted varieties'.

Lot Number is unique numbers and/or letters that identifies a batch of seed.

Seedsman (person or company labeling the seed) must have their name and address on the tag. They must also be registered in Kentucky and are responsible for the quality of the seed in the bag.

Origin is the state or country where the seed was grown.

Test Date identifies when the seed was tested for purity and germination. Seed viability declines with age, so a recent test date is important. In Kentucky, seed must be tested every nine (9) months.

Purity Analysis

Pure Seed identifies the seed in the bag. This is what is wanted and being paid for, so the higher, the better.

Inert Matter is non-seed materials – chaff, stones, dirt, plant parts– found in the seed lot. A low percentage is best.

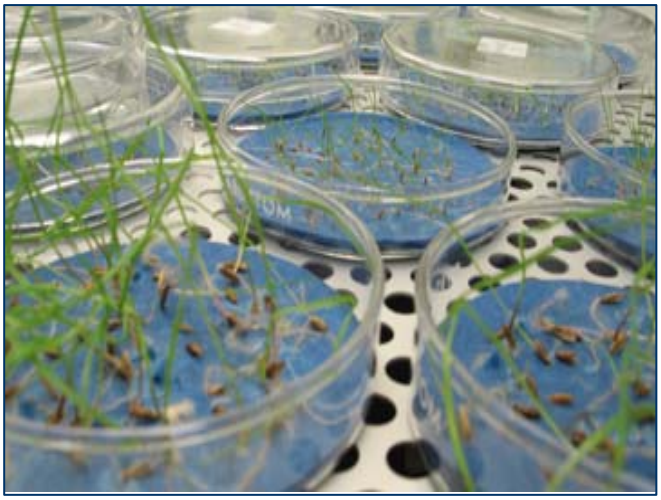
Crop Seed refers to other crops kinds present. (Bluegrass in a bag of orchardgrass seed, for example). Usually, a low percentage of other crop seed is desirable.

Weed Seed includes weeds in the bag. Examples include goosegrass, henbit, chickweed and most other common weeds. A low percentage is best – if you have weed problems already, you certainly don't want to plant more!

Noxious Weed Seed identifies the few weed seeds that are so undesirable that they are restricted by law. There are 2 classes of noxious weeds – restricted and prohibited. Restricted noxious weeds (sorrel or wild onion for example) are allowable in small amounts. Prohibited seed cannot be present in a lot (quackgrass or Canada thistle, for example). There are federal noxious weeds and each state determines its own noxious weeds. Kentucky's are:

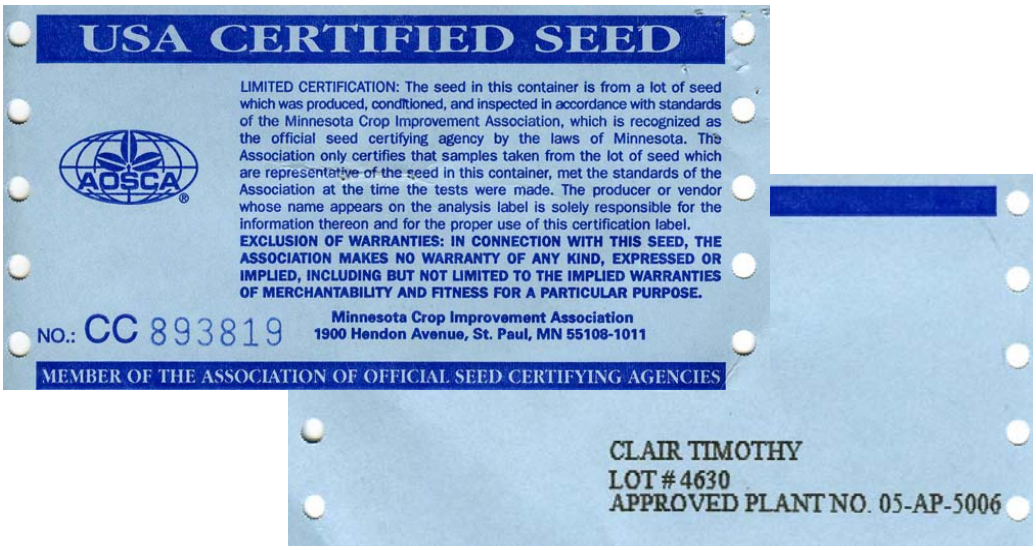
Restricted Noxious Weeds	Prohibited Noxious Weeds
• Annual Bluegrass • Buckhorn Plantain • Corncockle • Dodder • Giant Foxtail • Ox-eye Daisy • Wild Onion/Garlic • Sorrel	• Balloonvine • Canada Thistle • Johnsongrass • Purple Moonflower • Quackgrass

Germination is the percentage of seed that should germinate in the field. A high value is best. Total germination (or total viable) may be found on the tag and will be the sum of germination plus any hard or dormant seed.



What is Certified Seed?

Certified Seed goes through rigorous field inspections and must meet specific quality standards. Although sometimes more expensive, purchasing certified seed ensures the producer of varietal purity as well as high quality seed. Kentucky Seed Improvement Association (KSIA) is the certifying agency in Kentucky.



How are the tag values determined?

Laboratory tests are conducted to provide purity and germination information used by seed producers for labeling purposes. Testing protocols are proscribed in the Association of Official Seed Analysts' (AOSA) Rules for Testing Seeds or International Seed Testing Association's (ISTA) International Rules for Seed Testing**.** A purity analysis is a physical separation of the materials found in a sample. A specific weight of seed is analyzed and classified into pure seed, inert matter, weed seed and other crop seed as well as any noxious weed seed. A standard germination test is a direct evaluation of successful germination of the pure seed component under controlled laboratory conditions which correlates well to establishment under favorable field conditions.

Is seed offered for sale monitored?

Regulatory Services, a department of UK's College of Agriculture, administers a regulatory program to protect the seed industry and consumers through inspection and analysis of seed products in the marketplace. The seed program ensures compliance with the law by inspecting facilities and sampling seed offered for sale throughout the state. Inspectors sample seed lots and submit those for analysis. Laboratory analyses of official samples are compared to label guarantees to verify that the label is accurate and that seed quality meets a minimum standard. Seed lots not in compliance are restricted from sale until the violation is corrected. Approximately 2500-3000 samples of many seed kinds are tested for regulatory purposes each year in Kentucky.

How can I get more information?

To ask questions about seed regulation and testing, contact Chris Thompson (regulatory; Chris. Thompson@uky.edu) or Cindy Finneseth (testing; Cindy.Finneseth@uky.edu) at the Division of Regulatory Services (859-257-2785; 103 Regulatory Services Bldg.; University of Kentucky; Lexington, KY 40546-0275). Laboratory tours can be arranged for groups interested in learning more about seed in Kentucky.