USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

Plant Chat

Published quarterly by the Bismarck Plant Materials Center for NRCS Field Offices in North Dakota, South Dakota, and Minnesota
Spring 2013 Volume 13 Issue 2 http://Plant-Materials.nrcs.usda.gov/ndpmc

What Does a Seed Tag Tell You?

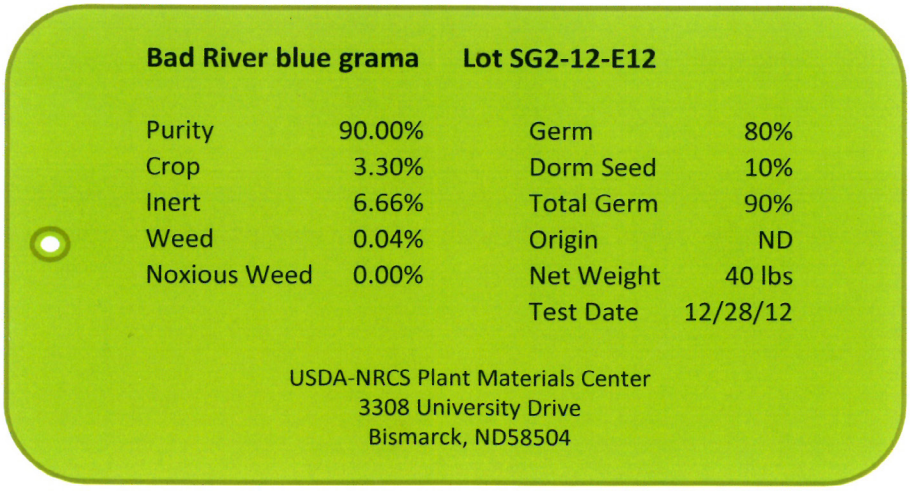
Understanding what is on a seed tag is important when purchasing seed. It gives the needed information to properly certify seed mixes for amount and quality of seed.

Name
The variety and species name. Tags for common seed should include the variety name, if known, otherwise VNS (variety not stated). Common seed needs to be from an acceptable state or Canadian province and varieties need to be from an accepted list for NRCS programs.

Lot Number
All seed sold needs a lot number. The lot number identifies the seed and provides a record of that seed lot.

Purity
Pure seed or purity is the percent of seed of the lot that is the stated species. For example, a purity of 90% tells you that 10% of the bag content is inert matter (chaff), weed seed, or other crop.

Other Crop
The percent by weight that is a crop other than the seed species labeled. It does not include weeds. The crop seed must be listed by name if it is more than 5% of the content. This includes annual crops, other grass and forb species other than the target species.



Inert
The percent by weight of chaff, sticks, dirt, and other debris. High inert percentages could affect the seed flow through a drill.

Weed Seed
The percentage of common and restricted weed seed in a lot.

Noxious Weed
Each state defines weeds that are restricted or prohibited. Restricted noxious weeds must be listed by name and the total seeds/pound identified on the tag. Lots containing prohibited noxious weeds are not allowed to be sold and planted in the state where it is listed as prohibited.

Germination
The percentage of seed that germinates in a set period of time under specific lab conditions. A germination test determines the capability of a seed lot to produce normal seedlings under favorable conditions.

Dormant Seed or Hard Seed
The portion of the seed sample that does not germinate during the time period of the seed test, but is determined to be alive and respiring. Hard seed is a type of dormant seed that has a seed coat impermeable to water.

Total Viability
The germination percentage plus the hard/dormant seed percentage. For example, 80% germination and 10% dormant seed equals a total viability of 90%.

Origin
Location where the seed was grown.

Test Date
The month and year of the germination test. For use in NRCS programs, the test date (excluding the test month) can be no older than 9 months in South Dakota and 12 months in North Dakota and Minnesota.

Net Weight
The bulk weight of the material in the bag.

Name and Address of Seller
The name and address of the seller.

Pure Live Seed (PLS) = Purity X Total Viability

90% purity and 90% total viability (germ + dormant and hard seed) would give you a PLS of 81%. This means the remaining 19% is other crop seed, weed seed or inert material. Remember to buy on a Pure Live Seed (PLS) basis but always calibrate and seed on a bulk weight basis.

Understanding the Tag of a Seed Mixture

Grasses and wildflowers are frequently sold as mixtures. In addition to the basic label (tag) information, a tag for a mixture will include:
1) individually listed purity and germination (including hard and dormant) seed percentages and origin of each kind of seed occurring in excess of 5% of the total weight.
2) pure seed percentage listed individually for each component as a percent of the whole.
3) identification that seed is a mixture.

Native Grass/Legume Mixture **Lot** G3L22013

Kind	Variety	Origin	% Pure Seed	% Germination	% Hard/ Dormant	% Total Viability
Big bluestem	Bison	ND	30	70	20	90
Little bluestem	Badlands ecotype	ND	30	65		65
Switchgrass	Forestburg	SD	20	80	10	90
Purple prairieclover	Bismarck germplasm	ND	10	75	20	95

Weed Seed: 0.50% **Other Crop:** 5.00%

Noxious Weed Seed: None **Inert Matter:** 4.50%

Germ Test Date: March 2013 **Net Weight:** 50 lbs

Labeler XYZ Elevator, 1 Harvest Way, Bismarck, ND 58502

To calculate PLS amount of each kind of seed in the mixture:
% pure seed/100 X % total viability/100 X net weight = PLS amount

(the PLS amount of each kind of seed based on the above tag)

Kind	% Pure Seed/100	% Total Viability/100	Net Weight (pounds)	PLS Amount (pounds)
Big bluestem	.30	.90	50	13.50
Little bluestem	.30	.65	50	9.75
Switchgrass	.20	.90	50	9.00
Purple prairieclover	.10	.95	50	4.75

To determine if all components of the mixture have been accounted for:
% pure seed of each kind + % weed seed + % other crop + % inert + % noxious weed seed = 100%

Reclassification of 'Shoshone'

The variety 'Shoshone' beardless wildrye, *Leymus triticoides* (LETR5) has been reclassified as manystem wildrye, *Leymus multicaulus* (LEMU11). Shoshone is no longer considered a native beardless wildrye variety. It is now considered an introduced manystem wildrye variety. Consider this change when planning your grass seeding mixes. Shoshone remains a very good forage grass and is well-adapted to saline areas.

The Rush of Spring Planting

When spring arrives, everyone is in a hurry to plant trees. Proper handling (keeping the stock moist, cool, and shaded) and paying attention to weather conditions increases planting success. The following chart and explanation illustrates how weather conditions relate to planting conditions.

A good rule of thumb is to discontinue planting when field temperature and humidity conditions fall above the curved line appropriate for sustained wind speeds at the site. As conditions approach those indicated by the appropriate wind speed line, use extra care to prevent desiccation of roots and tops. Site conditions falling below the appropriate wind speed line are generally considered good for tree and shrub planting. Cease planting when sustained wind speeds exceed 30 mph (miles per hour). To get a feel for changing climatic conditions throughout the previous day, visit your local weather website (http://ndawn.ndsu.nodak.edu/index.html; http://climate.sdstate.edu/climate_site/ag_data.htm; or http://climate.umn.edu/).