



# Seed Laboratory

North Dakota State Seed

## Seed Quality Testing Required For Labeling

Federal seed laws require specific information to be listed on seed labels. The following tests provide the necessary information for the labeler and provide valuable information for the consumer. These tests are standardized so they can be used to compare one seed lot to another.

### Standard Germination Test

This test is conducted following specific procedures and determines the *maximum potential* of the seed. The length of the test varies from 7 days to 6 weeks depending on the species. Most annual crops take 7 to 14 days. Results indicate the percentage of normal (free from defects) seedlings at the end of the prescribed test period. The dormant or hard seed percentages are also determined and reported with the germination results.

### Purity Examination

The purity examination is the physical separation of a sample of seed into four components; pure seed, other crop, weed seed, and inert material. The amount of seed examined varies by species but approximates 2500 average seeds. After the separation the components are weighed and the percentages calculated. The other crop and the weed seeds are identified and reported with the purity percentages. Inert material includes stems, soil, insects and broken seed of half or less the original size.

### Noxious Examination

The noxious examination is conducted on ten times the purity amount up to a maximum of 500 grams. Only the seeds specified by North Dakota law as noxious are separated in this test. The seeds are counted and reported as the number per pound of each kind. Noxious weed seeds vary by state so we offer a USA noxious examination, which will include weed seed that is noxious anywhere in the US. This is useful for labeling seed for sale in another state.