Quick Reference Guide for

# Value of Certified Seed

Seed quality is perhaps one of the most important factors in your buying decision. Purchasing quality seed of proven, adapted varieties is the best way to capture the true value of every variety. The seed certification process was established to ensure that the attributes selected by the breeder are actually delivered in the seed you purchase. The process was established to provide an adequate supply of high quality seed through field inspections, laboratory analyses and proper labeling.

## Field Inspection

The number of generations seed may be used for multiplication is limited, usually to three generations; Foundation, Registered and Certified. This means that certified seed is never more than three generations removed from breeder seed, the purist available. This ensures that the genetic potential that was bred into a variety, the very potential that gives a variety its unique value, is still present in the seed you plant. Certified seed producers must provide proof of genetic identity when they apply for certification. Our staff verifies the identity of every variety in every field prior to acceptance into the certification process. Trained field inspectors then examine each seed field based on the variety characteristics described by the breeder to verify the variety is correct.

Field inspectors also examine seed fields for other factors that affect purity of the seed such as isolation, the presence of other crops or other varieties. They also check for a long list of weeds that can impact the purity of the seed.

Most crops are inspected once prior to harvest. For small grains, 100,000 heads are examined to verify the variety. Some crops such as soybeans may be inspected twice to check for flower color or field reaction to herbicide, or in the case of dry edible beans, for incidence of seed-borne diseases such as anthracnose and bacterial blight.

## Professional Conditioning

Field-inspected seed must be conditioned at an approved conditioning facility to ensure its high quality. Annual inspections by the Seed Department ensure that conditioners have the proper equipment to adequately clean and handle certified seed, maintain clean facilities, and maintain proper records on each lot of seed they condition. A representative sample of every conditioned seed lot must be submitted to the Seed Department for lab analysis. Approved seed conditioners and mobile mills are listed in the Seed Directory and the department's website.

## Laboratory Testing

Trained seed technologists at the NDSSD examine every conditioned seed lot for physical purity. The purity analysis must be listed on the tag or bulk certificate of every lot of certified seed. Certified seed must meet or exceed minimum standards for purity, generally at least 98%. The percentage of inert matter, other crop seed and weed seed will also be listed on the seed label.

Each eligible seed lot is tested for germination before it can be labeled certified seed. Certified seed must meet or exceed minimum germination standards, usually 85%. Seed lots with high test weight, high germination and seedling vigor will generally yield better than lower quality seed. Germination must be listed on the label.

Certain diseases are spread through seed-borne mechanisms, whether in or on seed. In order to control these diseases, every lot of specific crops must be tested. It's another tool to ensure North Dakota certified seed is the best it can be.

## Success Begins with Quality Certified Seed

When you plan for the next crop year, purchase certified seed. Planting certified seed is the best way to capture the value bred into that variety. Field inspected, professionally conditioned and lab tested, certified seed meets the high expectations of today's successful farmers. Don't leave anything to chance. Demand certified seed for your farm.