What It Takes To Produce Certified Seed

by Sam Kessel,CGCS

In June of this year, after thirty years in the turf industry, I made my first trip to the seed fields of Oregon. It is an experience I recommend to anyone who has the opportunity.

The following is an overall observation of what it takes to bring the end user a good product.

Years of breeding, selection and evaluation are required in developing a new variety. The originator must provide documentation and receive approval before a variety is eligible for certification. Usually the breeder supplies seed from the breeder seed nursery which is used to produce the foundation or seed stock field.

The seed from this foundation field is used to establish certified (blue tag) seed fields. Seedstock (foundation) must be planted on clean ground that has proper cropping history and isolation from other varieties to assure genetic purity. When planting a commercial field, it is essential to have a clean and firm seedbed and provide the proper balance of nutrients. A crop management program must be implemented at each stage of growth and development throughout the growing season. Many growers plant their seeds in a band of charcoal to protect seedlings from the initial broadcast herbicides utilized for weed control. In some cases weeds that are taller than the crop can be removed by wiping glyphosate on them with a roller. Most often the field requires hand labor to spot spray or rogue containment in order to guarantee quality.

As the crop matures, it must be closely monitored to determine when to harvest to obtain the highest yield while assuring the seed will have good germination and vigor. The crop is first cut down (swathed) and placed in a windrow to dry. A combine picks up the windrow and separates the seed from the straw. Harvest equipment must be thoroughly cleaned to avoid contamination from other crops or weeds and maintain genetic purity.

Post harvest management on grass seed fields begins immediately after harvest and procedures vary depending on the species. Care must be taken in storing and handling seed to prevent mechanical damage or physical deterioration. The seed is cleaned to maximum purity by running it over a series of air-screen machines and other equipment to separate the seed from contaminates. Once the seed is cleaned, it is ready to be sampled and tested for pure seed components and viability. Certified seed is sampled by a designated official.

When the seed has passed all of the certification and testing requirements it is ready for packing, blending and shipping in accordance to standards required for final use.

The trip showed me that a tremendous effort is made to produce a quality product. It also reinforced a fact in my mind, that you need to know where your seed was produced.