### Why Grow Certified Seed?

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#### BECAUSE CERTIFIED SEED . . .

• CAN ADD TO FARM INCOME. Many producers of grass and legume seeds have substantially increased the value of their crops by growing certified seeds. These growers have found they cannot afford to plant seed from an unknown source; it must be one that can be certified.

Many seed crops grown in Oregon are produced for use in some other area of the United States or abroad. These are seeds of improved varieties that are purchased because they have special genetic qualities such as high yield, disease resistance, desirable time of harvest, and adaptability to climate and latitude. The only way the buyer can be assured of getting the genetic qualities he wants is by purchasing certified seed. This demand for genetic purity is usually expressed in a premium which is paid above the price of noncertified seed. Premiums vary from season to season, and from crop to crop depending upon the seed supply.

• HAS AN ADDED MEASURE OF QUALITY. Seed growers are seeking to produce the highest quality of seed possible in order to obtain the best price. An extra measure of quality—genetic purity—can be added by planting and harvesting a crop which can be certified. It is impossible to determine genetic qualities except by the seed and plant characteristics. These must be relied upon to determine the varietal identity and can be maintained by techniques of field and seed inspections through the certification system.

Seed planted for certification can be traced back to the parent seed stocks produced by the plant breeder. They are known to carry the desirable characteristics bred into the variety. The certified seed producer must maintain the genetic purity of the seed he harvests, through selection of fields which are isolated from crops that will cross pollinate and are free from volunteers.

- IS A GROWING PHASE OF AGRICUL-TURE. The use of certified seed is assuming greater importance in American agriculture. National production and consumption of certified seeds is increasing. This upward trend is likely to continue as new and improved varieties are developed. Growers who gain experience in quality seed production now will be able to reap benefits in future years. Positive assurance of varietal purity is needed as these varieties are marketed. Certification guarantees this assurance.
- IS ASSOCIATED WITH BETTER FARM-ING PRACTICES. Farmers who grow intensively cultivated crops have found benefits from growing specialized perennial varieties of certified grass or legume seeds in the rotation. These seeds have provided a high-value crop that will build soil organic matter. These varieties fit the rotation and improve yields of the more intensively tilled crops.

Most of the perennial seed crops provide a permanent soil cover. They give protection that reduces erosion as well as builds soil organic matter.

The use of noxious weed-free stock in making a planting for the production of certified crops reduces the possibility of introducing these troublesome weeds to the farm.

• PRODUCERS CANNOT TAKE A CHANCE ON UNKNOWN SEED. The cost of establishing any grass or legume stand for seed production is substantial. There are risks involved that cannot be avoided, such as adverse weather conditions; however, some can be avoided, such as poor germination, the introduction of noxious weeds, and the planting of a poor strain. These risks are minimized by seeding a certified variety.

### What Must a Grower Do to Qualify a Crop for Certification?

- USE AN APPROVED VARIETY. The variety grown for certification must be one approved by the Oregon Seed Certification Board to be eligible for certification. To be approved, a variety must have desirable genetic characteristics.
- USE APPROVED PLANTING STOCK ON APPROVED FIELDS. There are specific requirements for planting stock, field isolation, and previous crop-field history. These requirements vary with the crop planted. Growers should consult the Seed Certi-



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fication Standards, or the county Extension agent for details.

• APPLY FOR CERTIFICATION. The grower must make written application for certification at his county Extension office. This application must be accompanied by the acreage fee. Certification costs vary from about 40 cents to 75 cents per acre for grass, cereal, and legume crops. Tags identifying the seed source are required on new seedings. Sign-up deadlines are established and published in the Seed Certification Standards. Full information is available from Extension offices.

In addition to these steps, a grower should rogue the field. Roguing is the removal of undesirable plants from the field and is usually done at heading time. Harvesting equipment should be thoroughly cleaned and carefully adjusted before threshing in order to avoid mechanical mixing and minimize damage to the seed which could lower germination and storage life.

Cleaning and processing must be done at a plant that has the proper facilities to clean the lot of seed to the standard of purity required of certified seed. The processing plant must be able to maintain the identity of the seed lot.

#### What Are the Other Steps in the Certification Process?

- FIELD INSPECTION. Each field entered for certification is inspected after heading time and before the crop is harvested. Inspectors check for mixtures of varieties, isolation distances, and the presence of undesirable weeds. In addition, many perennial crops including alfalfa, red clover, Penncross creeping bent-grass, and Linn perennial ryegrass require a seedling inspection. At this inspection the field is checked for presence of contaminants or volunteers from previous crops. The grower must apply for the seedling inspection immediately after seeding.
- SEED SAMPLING AND TESTING. After cleaning, a representative sample of seed must be taken from the lot under the supervision of the certifying agency and tested for purity and germination at the Oregon State University Seed Testing Laboratory to make sure that the seed meets minimum seed standards.
- **TAGGING.** When all the requirements of seed source, field inspection, and purity and germination have been met, certification tags are placed on the seed containers under the supervision of the certifying agency.
- MARKETING. The marketing of certified seed is handled through regular seed trade channels.

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