

Oregon Agricultural College Extension Service

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CERTIFICATION OF SMALL GRAIN

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The purpose of grain certification is to locate and list for Oregon farmers reliable, clean, unmixed seed grain of standard varieties.

Oregon grows in a commercial way sixty-one wheat varieties. It is thought that cutting this number down to eleven or twelve will result in better yields and less mixed grain.

Certified seed grain comes from fields that have been inspected during the growing season for freedom from mixtures, serious disease, and inseparable seeds of other plants. A threshed sample from fields that pass the preliminary or field inspection is also examined. Inspections are made through the Extension Service of the Oregon Agricultural College free of charge and have for their purpose the standardization of cereal qualities and varieties.

When wheat is sold according to grade, a penalty or discount is placed on mixed wheat. This may result in a price reduction under the grain discount law to two percent of the value of the wheat. Furthermore, every wheat grower aims to grow the variety which does best and is the highest yielder in his locality. That being the case, the land should not be partly occupied by mixtures of lower-yielding varieties. Also, different varieties of grain ripen at different periods. The farmer who grows a mixed crop of wheat, oats, or barley is often forced to cut at a time when some of the grain is under ripe and some of it over ripe, which results in a loss by shattering and gives a product of uneven quality.

The biggest yield of the best quality comes from pure seed of the best adapted variety.

At least fifty percent of the wheat in certain sections of Oregon is subject to discount in price on account of mixture. This is due partly to the fact that many varieties are grown in the same locality and mixing is almost sure to occur by means of harvesting and threshing machinery. Volunteer is also responsible for mixture. Also, the varieties in such sections have to a large extent been grown there for a number of years without particular effort to keep them clean.

A considerable amount of wheat grown in some parts of Eastern Oregon is not badly mixed. This is due to several reasons, one of which is that many of the most important varieties are comparatively new wheats and have not yet become badly mixed. The worst mixtures are

in the old varieties. Another reason is that the best wheat-raising areas grow principally a few standard varieties. As these varieties are continued in the same localities from year to year, however, they may become badly mixed if some effort is not made to keep them pure.

1. Sowing mixed seed.
2. Growing several varieties on the same farm.
3. Mixtures through harvesting machinery.
4. Volunteer on poor summer fallow.
5. Using a different variety on rights of way around the fields and letting this get too ripe before cutting for hay.

In 1920, representatives of the Oregon Agricultural College inspected and certified 19,629 acres of wheat, 177 acres of oats, and 237 acres of barley. Many thousand acres of wheat were rejected because of mixture.

Most of the certified wheat was grown in Eastern Oregon. All the certified oats was grown in Western Oregon. The certified barley came from both sections of the State.

The greater part of the certified grain was used for seed in the county in which it was produced. Some of it was shipped out and some of it was sold to seed companies.

The best place and time to pick out clean seed is in the field after the crop has started to mature and before it is cut. Objectionable plants can be located most readily at this time.

Farmers who have promising fields that they wish to enter for inspection should inform their county agent. Information as to acreage, variety, and the probable time the crop will be ready for inspection will be of value in arranging the work, so that the county agent and the inspector may cover the territory to the best advantage. Cooperation in this matter is necessary because the area to be covered is extensive and the time and funds for making the inspection are limited.

Farmers whose cereals meet the standards will receive a statement of certification and those desiring them will be furnished printed tags at cost. It is requested that seed being shipped out of a community be tagged.

STANDARDS AND RULES FOR CERTIFICATION OF SMALL GRAINS

All grain or seed for certification shall be viewed in the fields by the inspector. From fields passing the field inspection, a threshed sample will be given a laboratory inspection and a germination test before a certificate is issued.

The presence of serious disease for which there is no very practical treatment shall disqualify.

The presence of more than a trace of commercially inseparable foreign seeds, except as noted below, shall disqualify.

Certification indicates that the seed has met the standards required as to purity, inseparable foreign material, disease, etc., but the matter of seeds being re-cleaned or not rests entirely between purchaser and seller.

Wheat. Wheat shall be certified in two classes, A and B. Class A shall contain no rye and not more than one-fourth of the penalty mixtures or the ordinary mixtures of other varieties or classes of wheat permissible in grade number one.

Class B shall contain not more than one-fourth of the permissible amount of rye or other inseparable cereal nor more than one-half the permissible penalty or ordinary mixture in grade number one and shall be listed only in communities where certified class A is scarce.

The presence of more than a trace of corn cockle, wild onion, vetch in considerable quantity, and other inseparable foreign material shall disqualify. The presence of loose smut or excessive amounts of common smut or bunt shall disqualify.

Oats. Oats for certification may contain not more than one percent of other distinct varieties of oats and may contain not more than one seed in one thousand of the wild oats.

Barley. Barley may contain not to exceed one percent of mixture of other varieties of barley. It may contain not to exceed one-half percent of mixture of other cereals that are inseparable.

Rye. Rye shall be certified as to winter or spring habit. It may contain not to exceed two and one-half percent mixture of other varieties and not to exceed one percent other grain or inseparable weed seed. Presence of ergot in serious quantities shall disqualify.