

SMALL GRAIN STANDARDS
(Wheat, Oats, Barley, Triticale and Rye)

I. Application and Amplification of General Certification Standards

The General Seed Certification Standards, as adopted by the Colorado Seed Growers Association, are basic, and together with the following specific standards, constitute the standards for certification of small grain seed.

II. Land Requirements

A. A crop of small grain will not be eligible for certification if planted on land on which the same variety was grown the previous cropping year, unless the previous crop was grown from any class of Certified seed of the same variety. A crop of small grain will not be eligible for certification as Registered class if planted on land where the same crop kind but different variety was grown in either of the last two cropping seasons. For Certified class the restriction shall be one year, with the exception of two cropping seasons when a white wheat variety follows a red wheat variety or vice versa.

III. Handling Crop Prior to Inspection

Roguing to remove off-type plants, other varieties, other crops and inseparable weeds is required prior to field inspection.

IV. Field Inspection

Field inspection shall be made after the crop is fully headed when varietal and crop mixtures can be determined.

V. Field Standards

A. General

1. Unit of Certification - The field shall be considered the unit of certification; a field cannot be divided unless adequately marked. A border strip at least 10 feet from another crop or variety must not be harvested until all Certified seed has been removed from the field. The grain from this strip must not be used for seed.
2. Isolation
 - a. Wheat, oats, barley, triticale - A field shall be separated by a strip of ground adequate to make positive identification of the field boundary. At harvest, a 10-foot border strip must be left when next to another crop or variety for the Certified, Registered and Foundation classes of seed. When a white wheat variety is planted next to a red wheat variety, a 30-foot border strip must be left in each field for the Registered class, and a 60-foot border strip must be left in each field for the Foundation class.
 - b. Rye - A field producing any class of Certified seed must be isolated by at least 600 feet from rye fields of any other variety or fields of the same variety that do not meet the varietal purity requirements of the class of seed inspected and are of the same chromosome number. Isolation between diploid and tetraploid rye shall be at least 15 feet.

B. Specific

Factor	Maximum permitted ratio of plants		
	Foundation	Registered	Certified
Other varieties	1: 3,000	1: 2,000	1: 1,000
Inseparable other crops*	1:10,000	1:10,000	1: 2,000
In malt barley	None	1:100,000	1:50,000
Rye in wheat, triticale, barley and oats	None	None	None
Noxious weeds whose seeds are inseparable**	None	None	None
Wild oats***	None	None	1 plant/10A

* Inseparable other crops shall include crop plants, the seed of which cannot be thoroughly removed by the usual methods of cleaning. Barley in oats is a well known example.

** Noxious weeds are designated in the Colorado State Seed Law. Any field found to contain jointed goatgrass plants (that have set seed) at an average density of greater than one plant per 100 square feet shall require a 30 lb (pound) seed sample and shall be subject to bin inspection. Any field found to contain jointed goatgrass plants (that have set seed) at an average density of greater than three plants per 100 square feet shall be rejected. Bin inspections shall be assessed at a minimum of \$50, but may be charged actual cost per CSGA Office discretion. A field found to contain bindweed may pass inspection if the weeds are plowed under, pulled out, mowed, or suppressed by chemical treatment to the point no seed can be set. If the bindweed plants are suppressed by chemical treatment after seed has set, the area must be staked off by posts prior to completion of inspection. These areas shall not be harvested for seed.

*** This tolerance is permitted because late wild oats continue to appear after each roguing. Growers must continue roguing fields until harvest time. No tolerance is permitted in the seed standards.

VI. Sampling for Laboratory Analysis

A representative two pound sample shall be submitted to the Colorado Seed Growers Association for analysis. This sample shall represent the seed which will be sold. If lots of different quality are offered for sale, a sample of each lot must be submitted for analysis.

VII. Seed Standards

Factor	Standards for each class		
	Foundation %	Registered %	Certified %
Pure seed (minimum)	95.00	98.00	98.00
Inert matter (maximum)	5.00	2.00	2.00
Noxious weeds (maximum)*	None	None	None
Jointed Goatgrass seed (maximum)	None	None	None
Total weed seed (maximum)	0.10	0.10	0.10
Total other crop seed(maximum)	0.06	0.12	0.25
Other small grains(maximum)	1 per lb.	1 per lb.	5 per lb.
Rye in wheat, barley and oats	None	None	None
Other small grains in malt barley	None	None	1 per lb.
Other varieties (maximum)			
Wheat, barley, rye and triticale	0.05	0.10	0.20
Oats	0.20	0.30	0.50
Other kinds (maximum)	0.01	0.02	0.05
Diseases**	NS	NS	NS

(Continued)

VII Seed Standards (continued)

Factor	Standards for each class		
	Foundation %	Registered %	Certified %
Germination (minimum)			
Wheat, barley, oats and triticale	NS	85.00	85.00
Rye	NS	80.00	80.00
Durum wheat	NS	85.00	85.00

* Noxious weeds are designated in the Colorado State Seed Law.

** If chemically controlled seed-borne diseases are noted upon field inspection or laboratory analysis, seed treatment is required.

NS = No Standard