

FIELD AND GARDEN BEAN STANDARDS

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 field and garden bean seed.

II. Land Requirements

- A. Beans cannot follow beans. If the same variety of the same certified class or higher is grown, one (1) growing season out of beans is required. Two growing seasons out of bean production are required between variety (including market class) changes. If bacterial blight or bacterial wilt is found during field inspection that field cannot be used for seed production for three (3) growing seasons.
- B. Fields must be free of volunteer beans.

III. Handling Crop Prior to Inspection

Roguing to remove off-type plants, other bean varieties and market classes, other crops and inseparable weeds (including nightshade plants with seed pods) is required prior to field inspection.

IV. Field Inspection

- A. Seed fields shall be inspected for isolation, off-type and diseased plants at the full bloom stage.
- B. A second inspection for beans grown on irrigated land shall be performed at maturity.

V. Field Standards

- A. General
 - 1. Isolation - Fields for certification must be at least 60 feet from any other beans unless the other fields meet the requirements for certification. A blank border row shall be maintained between contiguous fields.
 - 2. Fields must be free of any prohibited noxious weeds and those restricted noxious weeds difficult to separate. Fields may be refused certification due to unsatisfactory appearance caused by weeds, poor growth, poor stand, disease, insect damage and any other condition which prevents accurate inspections, or creates doubt as to the identity of the variety.
- B. Specific

Factor	Maximum permitted ratio of plants		
	Foundation	Registered	Certified
Other varieties	1:2,000	1:1,000	1:500
Other kinds (inseparable)	None	1:2,000	1:1,000
Total seed borne diseases*	1:100	1:100	1:100
Bacterial bean blights**	None	None	None
Bacterial wilt	None	1:10,000	1:5,000
Anthrachnose	None	1:10,000	1:5,000
Bean common mosaic virus	None	1:200	1:100
Nightshade plants (with pods)	1 plant/A	3 plants/A	5 plants/A
Noxious weeds (inseparable)	None	None	None

* White mold: If white mold is noted at inspection, it must be recorded on the inspection form. Seed must be thoroughly sampled and checked. **Bacterial bean blights include Bacterial Brown Spot, Common Bacterial Blight, and/or Halo Blight.

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

A. Seed samples shall meet the following standards for certification

Factor	<u>Standards for each class</u>		
	Foundation (%)	Registered (%)	Certified (%)
Pure seed (minimum)	95.00	98.00	98.00
Inert matter (maximum)	NS	2.00	2.00
Foreign matter (maximum)	NS	0.50	0.50
Splits and cracks (maximum)*	NS	2.00	2.00
Discolored (maximum)*	NS	2.00	2.00
Weed seeds (maximum)	NS	None	0.10
Nightshade seed	0.0001	0.0001	0.0001
Noxious weed seeds	None	None	None
Total other crop seed (maximum)	0.04	0.10	0.20
Other varieties (maximum)	0.02	0.05	0.20
Other kinds (maximum)	None	0.05	0.10
Germination (minimum)			
Field beans	NS	85.00	85.00
Garden beans	NS	75.00	75.00
White mold	None	None	0.0001

* Additional "Premium Seed" Standards: The total of inert, splits and cracks, discolored, other kinds, other varieties and weed seed, alone or in combination, shall not exceed 2.00%, except in Foundation Seed. Some seeds will exhibit more than one determining factor (inert matter, splits and cracks and/or discolored). The seed should only be categorized once, and in the following order: 1) Inert matter, 2) Splits and cracks if most severe factor, or 3) Discolored if equal or most severe factor.

NS = No Standard.

B. All foundation and registered beans must be treated before sale.