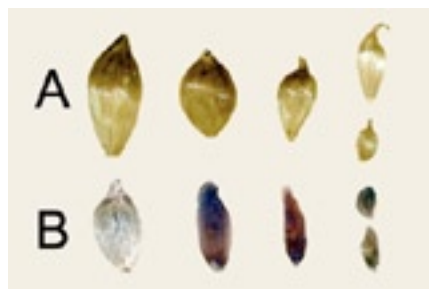


Soybean Special Grades, Sample Grades, and Official Criteria

Special grades identify unusual conditions in grain and are provided to emphasize special qualities or conditions affecting the value and are added to and made a part of the grade designation. They do not affect the numerical or sample grade designation. The soybean standards include three special grades:

Garlicky Soybeans. Soybeans that contain five or more (A) green garlic bulblets or an equivalent quantity of (B) dry or partly dry bulblets in a 1,000-gram portion.



Infested Soybeans. Soybeans that are infested with live weevils or other insects injurious to stored grain. Soybeans are considered infested if they contain two or more live weevils, or one live weevil and five or more other live insects injurious to stored grain, or ten or more other live insects injurious to stored grain.



Purple Mottled or Stained Soybeans. Soybeans with discolored or mottled seed coats due to the presence of mosaic virus, pokeberry stains, or dirt.

The discoloration may cover all or part of the kernel. All three are essentially aesthetic conditions and determinations are based on the sample as a whole when compared to an interpretive line print.



Pokeberry stain



Mosaic virus stain



Stained by dirt

SAMPLE GRADE FACTORS

Castor Bean	Contains a phytotoxin resin which is highly poisonous to man and animal. Symptoms include lethargic activity, abdominal cramps, violent heart contractions and diarrhea. Castor oil taken internally is not poisonous because the phytotoxin resin in castor bean is not oil soluble.
Crotalaria	Toxic to man and animal and can cause bleeding from the nose, blood in feces, extensive hemorrhaging and even death. The seeds can be recognized by a glove shape and very shiny appearance.
Mercury Treated Seed	It is now illegal and will fluoresce under a black light. It is toxic to man and animal if ingested. The treatment protects the seed from fungus and mold in the soil and has a higher germination rate.
Stones	Concreted earthy or mineral matter and other substances of similar hardness that do not disintegrate readily in water.

OFFICIAL CRITERIA

The following optional services are also available for describing the quality and characteristics of soybeans:

Oil and/or Protein	An applicant may request analysis for oil, protein, or both.
Sclerotinia Sclerotium	The fungus <i>S. sclerotiorum</i> causes a stem disease (stem rot) in soybeans which results in large black growths (sclerotia) on the stem and pods. Seeds may occasionally become infected within diseased pods. and may be flattened and badly shriveled.
Black Soybeans	Soybeans that have black seed coats.
Seed Sizing	Consists of a measurement of soybeans passing through or remaining on top of a sieve(s) size specified by the applicant for service.
Seed count	A measurement of the number of soybeans contained in a specified weight (i.e., number of soybeans per 1,000 grams, one pound, etc.)
White Hilum	A test to determine the percent of whole soybeans with clear white hilum. On request, tests for other hilum color (buff, brown, etc.) can be provided.
Cracked Seedcoats	A test to determine the percent of cracked seedcoats of sound soybeans.
Shriveled & Wrinkled Soybeans	Whole non-damaged soybeans with an atypical size and appearance that pass through the 10/64" x 3/4" slotted sieve and remain on top of the 8/64" round-hole sieve.