

## EDIBLE BEANS

1. How would beans that contain feed pellets be graded?

*ANSWER. Consider identifiable feed pellets as foreign material. If the pellets can not be identified, consider them to be FSUB.*

2. How would cowpeas function in a sample of Blackeye beans?

*ANSWER. Cowpeas which differ in color, size, or shape from Blackeye beans would function as beans of a contrasting class. Cowpeas which are similar in color, size, and shape to the Blackeye beans would function as classes that blend.*

3. What moisture chart should be used when grading Azuki Beans?

*ANSWER. The moisture chart would be the Pea bean chart. Azuki beans would be graded as miscellaneous beans; however, if the applicant requests, Azuki beans can be shown on the grade line.*

4. Can carrier identification numbers/symbols on submitted samples be used for submitted sample identification?

*ANSWER. Yes, according to the FGIS Policy Bulletin Board dated April 30, 1993, FGIS will certificate the identification for submitted samples as provided by the applicant for service.*

5. Can reduced portion size be used for a sample of edible beans made sample grade or substandard?

*ANSWER. Yes.*

6. How would a damaged Great Northern bean function in Pinto beans?

*ANSWER. Damage and contrasting class.*

7. Can an applicant have a review inspection (appeal or Board appeal) on a new sample for insect webbing or filth?

*ANSWER. No, because these are considered a deleterious situation.*

8. Can an applicant have a review inspection (appeal or Board appeal) on a new sample for the determination of weevily/sample grade due to clean-cut weevil-bored beans?

*ANSWER. Yes, because these are not considered deleterious.*

9. Can an applicant have a review inspection on an unworked file sample for the determination of weevily/Sample grade due to insect webbing or filth or clean-cut weevil-bored beans?

**ANSWER.** *Yes, but unless there has been a material error made, it should be explained to the applicant that the review inspection of the unworked file sample will not remove the designation "Sample Grade."*

10. When DKT is determined on a portion smaller than 500 grams, can defects (total) be determined on the small portion size?

**ANSWER.** *No. The remaining factors that comprise defects (total) are still analyzed on the prescribed portion size.*

11. How would a Pea bean covered by dirt (equal to or greater than the amount shown on VRI Bean 3.0 Dirt and Grime Affected) function in a sample of Pinto beans?

**ANSWER.** *Contrasting classes and damage. Since the Pinto beans are the predominant class, the Pea bean would function as damage because of the dirt.*

12. Can a factor only determination (e.g. damage) be done on a portion size smaller than the prescribed portion?

**ANSWER.** *Yes, if there is insufficient beans to use the prescribed portion size, the factor may be determined in the amount available. This policy is only applicable for factor-only submitted sample inspections.*

13. Are lupins graded as miscellaneous beans?

**ANSWER.** *Lupins are not considered edible beans. Consequently, under the AMA, they are to be graded "Not Standardized Commodity." Moisture and other factors may be determined upon request.*

14. What does bearing grease function as when found on edible beans?

**ANSWER.** *Unknown Foreign Substance. If two or more beans are found in a 1000 gram work sample, make the sample U.S. Sample grade. Because the substance is not considered deleterious, the sample grade designation may be removed either on the basis of a new sample or review of the file sample.*

15. Can a commonly accepted commercial name be used for all classes of beans?

**ANSWER.** *Yes. Here are some examples:*

CLASS	COMMON NAME
Black Beans	Black Turtle Soup Beans
Pea Beans	Navy Beans
Miscellaneous Beans (Garbanzo Beans)	Chickpeas

16. If a sample is made not well screened, are the small beans and/or foreign material put back into the work sample where they would function as damage or foreign material, if applicable?

**ANSWER.** *Yes. After the determination of not well screened, recombine the work sample before determining the remaining grading factors.*

17. If an inspector questions whether the edible beans offered for inspection are uniform in size, what sieve(s) should be used in the determination of "not well screened?"

**ANSWER.** *Suppliers of pinto and small red beans reportedly use a 9/64 round-hole sieve to separate small, undesirable beans and assure delivery of a uniform product. In view of this accepted practice, use the 9/64 sieve in the assessment of "not well screened" in these and other similarly sized classes of beans. For those classes that are significantly larger or smaller in size, it is recommended that you contact a local/regional supplier to determine what sieve they commonly use for clean out purposes and use the same or similar sized sieve.*

18. An external examination of a whole bean reveals no visible indication of insect damage. After opening the bean to investigate for possible internal damage, evidence of insect damage is found. Does the bean function as damage or sound?

**ANSWER.** *Sound. Insect damage is determined before splitting.*

**Note:** If after opening the bean, there is evidence of refuse, excreta, dead insects, or larvae, the bean would function as insect webbing or filth.

19. Do immature beans which have a green discoloration on the inside only (split) function as damage?

**ANSWER.** *No.*

20. Detached hulls in edible beans function as splits. If a detached hull has dirt attached to the seedcoat, does it function as foreign material, damage, or splits?

**ANSWER.** *If the amount of dirt on the detached hull meets the dirt or grime VRI, it is considered damage, otherwise it would function as a split.*

21. If a sample contains two clean cut weevil bored beans, two live weevils or other live insects, or two beans that contain insect webbing or filth, the sample is graded U.S. Sample grade. Does the same grade apply if it contains one live insect or one clean-cut weevil bored bean and one bean contaminated with insect webbing or filth?

**ANSWER.** *Yes. In this instance, the sample would be considered DLQ.*

22. Can the barley pearler be used as an aid in grading edible beans that are suspected of containing a notable amount of internal damage?

**ANSWER.** *Yes. But all other factor determinations have to be determined before pearling. (Refer to SPB's memo dated 2/6/97).*

23. Are beans considered damage if the sprout has been broken off or contains sprout sockets and are not otherwise damaged?

*ANSWER. Yes. If the "socket" area is discernible and there is evidence of sprout in the sample.*

24. How would a Pinto bean covered by dirt (equal to or greater than the amount shown on VRI Bean-9.1 Dirt and Grime Damage) function in a sample of Pea beans?

*ANSWER. Contrasting classes and damage.*

25. Should a sample of cowpeas be inspected under the Blackeye bean or Miscellaneous bean standards; or are they considered a Not standardized commodity?

*ANSWER. Miscellaneous beans.*

26. When analyzing edible beans, what do the empty bean pods function as?

*ANSWER. Foreign material.*

27. Can you apply a numerical grade for a sample less than 1000 grams?

*ANSWER. Yes. For officially sampled lots, work portions should weigh at least 900 grams. However, for submitted samples, a minimum of 450 grams is required to apply a numerical grade. Submitted samples weighing less than 450 grams shall be restricted to a factor-only inspection.*

28. The current definition of edible beans does not contain any language establishing a minimum percent of whole beans that must remain in the sample after the removal of dockage or a maximum limit for foreign material, as do other commodities. Does this mean that a sample may contain an unlimited amount of splits and FM and still meet the definition of "whole dry beans?"

*ANSWER: Yes. According to the United States Standards for Beans, beans shall be dry threshed field and garden beans, whole, broken, and split, commonly used for edible purposes. The definition does not contain a percent maximum limit of split beans; therefore, a sample may contain large amounts and still meet the definition of beans. However, if the sample exceeds the percent maximum limit of FM, splits, or Total Defects, the sample would grade U.S. Substandard.*

29. When grading a sample of mixed beans, should the tolerance for dirt and grime be applied to all classes of beans, including pea beans?

*ANSWER. Yes. The exemption GIPSA granted regarding the application of dirt and grime only pertains to the class Pea beans.*

30. When inspecting a sample of pea beans that contain Great Northern bean splits, do the splits function as contrasting classes as well as splits?

*ANSWER. Yes, provided the splits are sound. If the splits are damaged, they would function as damage and contrasting classes.*

31. What does Sclerotinia function as when found in edible beans?

*ANSWER. Foreign material*

32. Can small seeded Garbanzo beans be picked on a different portion size than large seeded Garbanzo beans?

*ANSWER. Yes. Garbanzo beans are considered Miscellaneous beans and damage is based for a class of beans of similar size and shape.*

*Large seeded Garbanzos-500 grams*

*Small seeded Garbanzos-250 grams*

*If a portion smaller than 500 grams is used for damage the remaining factors that comprise defects are still analyzed on the prescribed portion size.*

33. Are Cranberry beans considered white/off white for the determination for dirt/grime and water blistered damage?

*ANSWER. Yes, in most instances. Aging Cranberry beans are the exception and the resulting discoloration must be considered in these visual assessments. The natural aging process darkens these beans such that their color approaches that of the pinto bean. As the color of the bean darkens, inspectors should use their judgement in determining which of the illustrated beans to use a guide. In the case of water blistered, the degree of discoloration will dictate which of the illustrated pinto beans to use.*

34. Are Blackeyes with different colored eyes and/or size separated as either contrasting classes or classes that blend?

*ANSWER. No.*

35. How should an edible bean sample that contains two insect bored beans, the cavities of which have been invaded by mold, be graded?

*ANSWER. U.S. Sample grade. Technically, the beans in their present state do not meet the definition of clean cut weevil bored, the fact that the moldy condition occurred after-the-fact must not be ignored. As such, sufficient evidence is available to consider the beans infested/weevily.*

36. Do edible beans, (usually Pea beans or Great Northerns) which have a purple discoloration on the seed coat, function as damage?

*ANSWER. Yes. Inspectors should use VRI Bean-9.0, “Mold Damaged Beans” (lower right bean) for a minimum color/coverage requirement. If any amount of purple discoloration penetrates the seed coat or is present on an exposed part of the bean, it is considered damage.*

37. What does acrylic function as when found in edible beans?

*ANSWER. Unknown Foreign Substance (FSUB)*

38. How would you grade Dehydrated Pinto Beans?

*ANSWER: Dehydrated Pinto Beans are a processed commodity and as a result, would be certified as Dehydrated Pinto Beans.*

39. What does green plant matter function as when found on edible beans?

*ANSWER. Plant material adhering to the seed coat in an amount equal to or greater than shown on VRI-Bean 3.0, “Dirt and Grime” (Pea Beans) or VRI-Bean 3.1, “Dirt and Grime” (other than Pea Beans), is considered damage.*

40. In some instances Edible Beans function as Damage and Contrasting Classes. When this occurs are they scored only once against Total Defects?

*ANSWER. No. Since they must be included in the reported percentage of each individual factor and total defects represents the sum of damage, foreign material, splits, and contrasting classes, they are essentially scored twice in the calculation of total defects.*

41. The Bean Inspection Handbook defines, in part, the insects which function as weevils in determining “weevily” beans. It states that “Other live insects” shall include beetles, moths, meal worms, and other insects injurious to stored peas. To further define “other insects injurious to stored peas” should we refer to the USDA-ARS, Agricultural Handbook 500, “Stored–Grain Insects?”

*ANSWER. Yes. Two or more live insects make a sample “Weevily” and graded U.S. Sample grade. One can also view images of insects on the GIPSA website.*

42. Sometimes when Black beans are split to examine for internal damage the cotyledons are discolored a black/blue/gray. Are they considered damaged?

*ANSWER. No. Carrington Research Extension Center, Carrington, North Dakota has evaluated this condition for evidence of fungal/bacterial growth and concluded that the condition/discoloration is a result of the seed coat pigment bleeding into the cotyledon, possibly due to poor (high moisture) harvesting conditions.*

43. Pea beans are similar in size to Adzuki, Black-eye, Black, Flat Small White, Pink, and Small White beans but damage is currently based on a different portion size. Damage for Pea beans is based on approximately 500 grams while the other classes listed are based on approximately 250 grams. The Inspection Handbook also states the amount used for Miscellaneous beans is based on the class of beans of similar size and shape. Since Pea Beans are of similar size and shape to the classes listed is it permissible to base damage and/or dirt/grime on approximately 250 grams for Pea beans?

*ANSWER. Yes. But if Badly Damaged Beans are present damage should be based on 500 grams.*

44. How do Black Kidney Beans function in Dark Red Kidney or Light Red Kidney Beans?

*ANSWER. Contrasting Classes*

45. Can Black Beans in which the seed coats are missing the black pigment (usually brown to maroon in color) be considered as damage or made DLQ?

*ANSWER. No. While the beans may detract from the general appearance and would appear to be candidates for damage, the US Dry Bean Council has advised GIPSA that the condition is a sign of immaturity, and that due to the normally smaller size they can be easily cleaned out when processed. Thus, unless the beans are otherwise damaged, they are considered sound. And with the removal of color from the bean standards (2005), unless specifically requested by an applicant, color is no longer a relevant quality measure.*

46. Badly damaged beans are applicable only to classes Large Lima, Baby Lima, Miscellaneous Beans and Pea Beans. When present, is the percent of badly damaged beans included in the damage bean percentage (thus included in Defects).

*ANSWER: Yes*

47. Are Pinto Beans with black streaks instead of the normal brown or mahogany red streaks considered as Contrasting Classes or Classes that Blend?

*ANSWER: No. They are still certified as Pinto Beans.*

48. The certification chapter (Chapter 4, dated 4/01/99) of the Bean Inspection Handbook still states that "Off-color" is a special grade. Is this correct?

*ANSWER: No. In 2005 "Off-color" was eliminated as a special grade and is now only determined only upon request. This will be corrected when the chapter is updated.*

49. In pea beans, the grading standard requires that the percentage of “Contrasting Classes” and “Foreign Material” be reported to the nearest hundredth percent for special grades “Choice Handpicked” and “Prime Handpicked.” If the requirements for these special grades are not met, do you still record the percentage of CCL and FM to the nearest hundredth percent?

*ANSWER: Yes, up to 0.04%. Pea Beans that contain 0.05 percent or more of contrasting classes and/or foreign material are certified to the nearest tenth percent.*

50. When found in a sample, are clean-cut weevil bored beans and/or insect webbing and filth, which are determined on a count basis, to be included in the damage percent as well?

*ANSWER. Yes, when found in the damage subportion. Remember, the minimum “basis of determination” for either condition is the 1,000 gram work sample. If only one affected bean is found in the work, the file must be reviewed for any additional contamination.*

51. What does the presence of honeydew function as when found on edible beans?

*ANSWER. Honeydew (a yellow/brown sticky substance secreted by an aphid) adhering to the seed coat in an amount equal to or greater than shown on VRI-Bean 3.0, “Dirt and Grime” (Pea Beans) or VRI-Bean 3.1, “Dirt and Grime” (Other than Pea Beans), is considered damage. Beans which contain a substantial amount of honeydew affected beans which are not considered damage should be graded Distinctly Low Quality.*

52. Can Black Beans in which the seed coats are missing the black pigment (varies from purple, pink, brown, maroon to white in color) be considered as Contrasting Classes.

*ANSWER. No. While the beans may detract from the general appearance and would appear to be candidates for contrasting classes, the US Dry Bean Council has advised GIPSA that the condition is a sign of immaturity, and that due to the normally smaller size they can be easily cleaned out when processed. With this in mind, remember that the standard’s definition limits Contrasting Classes to “beans of other classes that are of a different color, size, or shape from the beans of the class designated.” Color is not the single criterion to consider in this assessment. To function as contrasting classes, the bean first must be of another class. And with the removal of color from the bean standards (2005), unless specifically requested by an applicant, overall color is no longer a relevant quality measure.*



53. What standards are Pinkeye beans graded under?

***ANSWER.** Blackeye beans. Refer to FGIS POLICY BULLETIN BOARD, Reference #193, dated February 27, 2001. It has been determined that Pinkeye beans are a Violeteye cowpea, and conform to the standards under Blackeye beans. To certify Pinkeye beans, use the term Blackeye beans on the grade line. If an applicant requests “Pinkeye beans” on the certificate, enter it in the remarks section.*

54. Is mildew considered a surface mold and considered damage?

***ANSWER.** Yes. Mildew affected beans, except Garbanzo Beans, are considered mold damage if they meet VRI BEAN-9.0 Mold Damage. Mildew affected Garbanzo Beans are considered mold damage if they meet VRI PEAS 1.4 Mold / Mildew Damage. Beans containing any amount of mildew on the cotyledon are damaged.*

***NOTE:** This type of damage does not go into effect until the 2012 harvest.*

*{Updated 11/13/2012}*