



United States Department of Agriculture

Agricultural Marketing Service
FEDERAL GRAIN INSPECTION SERVICE

Official Service Provider

Required Visual References

August 2017

**National Grain Center
10383 N. Ambassador Drive
Kansas City, Missouri 64153
(816) 891-0499**

Visual Reference Images (VRI)

BARLEY (*clear finish*)

PAGE 1

APPROVED DATE

B-1.0 BLIGHT DAMAGE	10/11
B-1.1 MOLD DAMAGE	10/11
B-3.0 INJURED-BY-FROST	10/11
B-3.1 FROST DAMAGE	10/11

PAGE 2

B-4.0 GERM DAMAGE (DISCOLORED AND/OR MOLD)	10/11
B-5.0 INJURED-BY-HEAT	10/11
B-5.1 HEAT DAMAGED.....	10/11
B-6.0 WEEVIL OR INSECT BORED	10/11

PAGE 3

B-7.0 INJURED-BY-MOLD	10/11
B-8.0 SPROUT DAMAGE	10/11
(B) O.F. - 2.1 SKINNED AND BROKEN	10/11
(B) O.F. - 2.3 A. TWO-ROWED & B. SIXED-ROWED	10/11

CANOLA (*clear finish*)

PAGE 1

CANOLA-1.0 DISTINCTLY GREEN	07/03
CANOLA-2.0 HEAT DAMAGE.....	07/03
CANOLA-3.0 OTHER DAMAGE (A. RIMED & B. FROST & C. MOLD).....	05/10
CANOLA-4.0 SPROUT DAMAGE (A. DAMAGE & B. NOT DAMAGE).....	07/03

CORN (clear finish)

	APPROVED DATE
PAGE 1	
C-3.0 DRIER DAMAGE	05/02
C-4.0 GERM DAMAGE	08/08
C-5.1 HEAT DAMAGE (WHITE)	05/02
C-5.2 HEAT DAMAGE (YELLOW)	05/02
PAGE 2	
(C)O.F.-7.1 MIXED CORN (MORE THAN SLIGHT TINGE-STRAW)	05/02
(C)O.F.-7.2 MIXED CORN (WHITE-CAPPED YELLOW CORN)	05/02
(C)O.F.-7.5 CORN OF OTHER COLORS	05/09
(C)O.F.-7.8 SLIGHTLY YELLOW IN (WHITE WAXY) CORN	05/02
PAGE 3	
C-5.0 HEAT DAMAGE (DRIER)	05/02
C-10.0 SURFACE MOLD (BLIGHT)	05/02
(C)O.F.-7.7 MIXED CORN (MORE THAN SLIGHT TINGE-PINK)	05/02
(C)O.F.-7.71 MIXED CORN (PURPLE PIGMENTED CORN)	05/02
PAGE 4	
C-1.0 BLUE-EYE MOLD DAMAGE	05/02
C-2.0 COB ROT DAMAGE	05/02
C-7.0 MOLD DAMAGE	05/02
C-11.0 SURFACE MOLD (MORE THAN SLIGHT)	05/02
PAGE 5	
C-1.1 PURPLE PLUMULE (NOT DAMAGE)	05/02
C-7.1 NOT DAMAGE (DIRT)	05/02
C-7.2 MOLD DAMAGE (PINK EPICOCCUM)	05/02
C-8.0 SILK CUT	05/02
PAGE 6	
C-4.2 NOT GERM DAMAGE	05/02
C-6.0 INSECT DAMAGE	05/02
C-9.0 SPROUT DAMAGE	05/02
(C)O.F.-7.9 WAXY & (C)O.F.-7.91 NON-WAXY	05/02 or 05/09

EDIBLE BEAN (*clear finish*)

PAGE 1	APPROVED DATE
BEAN-1.0 BADLY DAMAGED	05/12
BEAN-2.0 CLEAN-CUT WEEVIL-BORED	05/12
BEAN-2.1 VISIBLE WINDOW DAMAGE (WEEVIL).....	05/12
BEAN-3.0 DIRT AND GRIME PEA BEANS (NOT DAMAGE)	05/12
PAGE 2	
BEAN-3.1 DIRT & GRIME DAMAGE (OTHER THAN PEA BEANS).....	05/12
BEAN-4.0 FROST DAMAGE	05/12
BEAN-5.0 GREEN DAMAGE (CHICKPEA)	05/12
BEAN-6.0 INSECT STUNG DAMAGE (BLACK EYE).....	05/12
PAGE 3	
BEAN-6.1 INSECT STUNG DAMAGE (OTHER BEANS)	05/12
BEAN-6.2 INSECT STUNG DAMAGE (WHITE BEANS).....	05/12
BEAN-7.0 INSECT WEBBING OR FILTH	05/12
BEAN-8.0 WORM EATEN DAMAGE	05/12
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BEAN-9.0 MOLD/MILDEW DAMAGE	05/12
BEAN-9.1 MOLD DAMAGE (PINK/BROWN).....	05/12
BEAN-10.0 NIGHTSHADE DAMAGE	05/12
BEAN-11.0 SPROUT DAMAGE	05/12
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BEAN-12.0 WATER BLISTERED DAMAGE	05/12
BEAN-12.2 WATER BLISTERED DAMAGE (PINK BEANS)	05/12
BEAN-13.0 DAMAGED (PIECES).....	05/12
BEAN-14.0 INTERNAL (RESPIRATION) DAMAGE.....	05/12
PAGE 6	
BEAN-15.0 MACHINE DAMAGE	05/12

FLAX (clear finish)

	APPROVED DATE
PAGE 1	
F-1.0 DAMAGED FLAXSEED (BEE'S WINGS)	10/11
F-2.0 DAMAGED BY HEAT	10/11
F-3.0 HEAT DAMAGE	10/11

LENTIL (clear finish)

PAGE 1	
LEN-1.0 INSECT-STUNG DAMAGE	05/12
LEN-1.1 BLIGHT (ASCOCHYTA) DAMAGE	05/12
LEN-1.2 FROST DAMAGE.....	05/12
LEN-1.3 HEAT DAMAGE.....	05/12
PAGE 2	
LEN-1.4 DAMAGED BY HEAT	05/12
LEN-1.5 MOLD DAMAGE	05/12
LEN-1.6 SPROUT DAMAGE.....	05/12
LEN-1.7 SKINNED	05/12
PAGE 3	
LEN-1.8 DIRT/GRIME	05/12
LEN-2.0 WRINKLED	08/17

OATS (clear finish)

PAGE 1	
O-1.0 BADLY GROUND AND/OR WEATHER DAMAGE	10/11
O-1.1 WEATHER DAMAGED (STAINED)	10/11
O-2.0 GERM DAMAGE (SICK AND/OR MOLD)	10/11
O-2.1 MOLD DAMAGE.....	10/11
PAGE 2	
O-3.0 HEAT DAMAGE.....	10/11
O-4.0 INSECT DAMAGE.....	10/11
O-5.0 SPROUT DAMAGE	10/11

PEAS (clear finish)

	APPROVED DATE
PAGE 1	
PEAS/S. PEAS-1.0 DAMAGE (CHALKY)	11/10
PEAS-1.1 DAMAGE (A. DIRT, B. GRIME)	11/10
PEAS/S. PEAS-1.2 HEAT DAMAGE	11/10
PEAS/S. PEAS-1.3 DAMAGED BY HEAT	11/10
PAGE 2	
PEAS-1.4 MOLD/MILDEW DAMAGE	11/10
PEAS-1.5 SPROUT DAMAGE	11/10
PEAS-1.6 WEEVIL DAMAGE	11/10
S.PEAS-1.61 WEEVIL DAMAGE (CAVITY)	11/10
PAGE 3	
PEAS-1.7 WEEVIL DAMAGE (STING)	11/10
PEAS-1.8 FROST DAMAGE	11/10
PEAS/S.PEAS-2.0 BLEACHED (GREEN PEAS)	11/10
PEAS/S.PEAS-2.1 BLEACHED (YELLOW PEAS)	11/10
PAGE 4	
PEAS-3.0 CRACKED SEED COATS	11/10
S.PEAS-4.0 STAINED (GREEN)	11/10
S.PEAS-4.1 STAINED (YELLOW)	11/10
PEAS-5.0 SHRIVELED (SMOOTH)	11/10
PAGE 5	
PEAS-5.2 SHRIVELED (WRINKLED)	11/10
PEAS-5.3 BACTERIUM/FUNGAL STAIN	11/10
PEAS-5.4 WEATHER DAMAGE	11/10
S.PEAS-4.2 WHOLE DRY PEA	11/10

RICE (*clear finish*)

	APPROVED DATE
PAGE 1	
R-1.0 OBJECTIONABLE SEEDS.....	07/12
R-1.2 NON OBJECTIONABLE SEEDS.....	07/12
R-2.0 HEAT DAMAGE.....	07/12
R-2.1 DAMAGE BY HEAT (STAIN)	07/12
PAGE 2	
R-2.2 LIGHTLY STAINED (NOT DAMAGE)	10/12
R-2.7 PECKY KERNELS DAMAGE	10/12
R-2.71 WATER, STAIN, AND PECK DAMAGED (GLUTINOUS RICE).....	10/12
R-7.0 SMUT DAMAGE	10/12
PAGE 3	
R-8.0 CHALKY KERNELS.....	02/13

RYE (*clear finish*)

PAGE 1	
RY-1.0 GERM DAMAGE (SICK AND/OR MOLD)	10/11
RY-3.0 SPROUT DAMAGE	10/11
RY-3.1 EXPOSED GERM IN SOUND RYE (NOT SPROUT).....	10/11
RY-3.2 A. INSECT CHEWED & B. SPROUT SOCKETS.....	10/11
PAGE 2	
RY-4.0 WEEVIL OR INSECT-BORED.....	10/11
RY-5.0 OTHER DAMAGE.....	10/11

SORGHUM (*clear finish*)

	APPROVED DATE
PAGE 1	
S-1.1 GERM DAMAGE (BLEACH METHOD)	09/02
S-5.1 MOLD DAMAGE (INTERNAL MOLD).....	06/07
S-3.0 HEAT DAMAGE	09/02
S-5.0 MOLD DAMAGE	09/02
PAGE 2	
S-2.0 GROUND AND/OR WEATHER DAMAGE	09/02
S-9.0 TANNIN SORGHUM (BLEACHED)	09/02
S-8.0 PURPLE PIGMENTED DAMAGE.....	10/07
(S) OF-33.0 WHITE SORGHUM	09/02
PAGE 3	
S-4.0 INSECT BORED DAMAGE	09/02
S-6.0 SPROUT DAMAGE	09/02
(S) OF-16.0 NON-GRAIN SORGHUM	09/02
S-7.0 SPLIT GERMS (SOUND KERNELS).....	09/02

SOYBEANS (*clear finish*)

PAGE 1	
SB-1.0 BADLY GROUND AND/OR WEATHER DAMAGE	11/02
SB-3.0 GREEN DAMAGE	11/02
SB-2.0 DAMAGED BY HEAT	11/02
SB-5.0 HEAT DAMAGE (MATERIALLY DAMAGED/HEATING).....	11/02
PAGE 2	
SB-1.1 WEATHER DAMAGE (GRAY/BLACK)	11/02
SB-12.0 SOYBEANS OF OTHER COLORS	11/02
SB-8.1 MOLD DAMAGE (PINK).....	11/02
SB-3.2 FROST DAMAGE (WAXY)	11/02
PAGE 3	
SB-7.0 INSECT BORED KERNELS	11/02
SB-8.0 MOLD DAMAGE.....	11/02
SB-9.0 SPROUT DAMAGE	11/02
SB-10.0 STINKBUG OR INSECT STUNG KERNELS	11/02
PAGE 4	
SB-6.0 IMMATURE (WAFER)	11/02
SB-13.0 SHRIVELED AND WRINKLED.....	11/02
(SB) OF-36.0 WHITE HILUM	01/06

SUNFLOWER (clear finish)

	APPROVED DATE
PAGE 1	
SS-1.0 DAMAGED BY HEAT	10/11
SS-2.0 HEAT DAMAGE.....	10/11
SS-3.0 SURFACE MOLD	10/11

WHEAT (clear finish)

PAGE 1	
W-4.0 GERM DAMAGE.....	01/03
W-4.2 GERM DAMAGE (BLEACH METHOD)	11/09
W-6.0 HEAT DAMAGE (DURUM)	11/09
W-6.1 HEAT DAMAGE (OTHER THAN DURUM)	11/09
PAGE 2	
W-1.0 BLACK TIP DAMAGE (FUNGUS).....	01/03
W-2.0 SCAB DAMAGE.....	11/09
W-4.1 MOLD DAMAGE	01/03
W-7.0 OTHER DAMAGE (MOLD)	01/03
PAGE 3	
W-3.0 FROST DAMAGE (BLISTERED)	01/03
W-3.1 FROST DAMAGE (CANDIED).....	11/09
W-3.2 FROST DAMAGE (DISCOLORED BLACK OR BROWN)	01/03
W-3.3 FROST (FLAKED).....	01/03
PAGE 4	
W-9.1 INSECT CHEWED WHEAT (NOT DAMAGED)	11/09
W-8.0 SPROUT DAMAGE.....	11/09
W-5.0 GREEN DAMAGE (IMMATURE)	01/03
W-9.0 WEEVIL OR INSECT BORED	01/03

General Appearance Prints

SORGHUM (*sprayed matte finish*)

Approved Date: 01/07 or later

Distinctly Discolored (White Appearance)
Distinctly Discolored (Sorghum or Tannin Appearance)
Distinctly Discolored (Sorghum/Tannin & White Appearance mixed)
Badly Weathered (White Appearance)
Badly Weathered (Sorghum/Tannin & White Appearance Mixed)
Badly Weathered (Sorghum/Tannin Appearance)

SOYBEAN (*sprayed matte finish*)

Approved Date: 06/07 or later

Purple Mottled or Stained by the Growth of a Fungus
Purple Mottled or Stained by Dirt or Dirt-like Substances
Purple Mottled or Stained by Pokeberry Stain

OAT (*sprayed matte finish*)

Approved Date: 05/07 or later

Slightly Weathered
Materially Weathered

WHEAT (*sprayed matte finish*)

Approved Date: 10/07 or later

Tagged Ends (White/Durum)
Tagged Ends (Red)

HDWH COLOR LINE (*sprayed matte finish*)

Approved Date: 06/07 or later

RICE COLOR (*sprayed matte finish*)

Approved Date: 10/08 or later

Creamy
White
Slightly Gray
Light Gray
Gray
Dark Gray
Slightly Rosey
Rosey

RICE MILLING DEGREE (*sprayed matte finish*)

Approved Date: 02/10 or later

Hard Milled
Well Milled
Reasonably Well Milled

LENTIL (*sprayed matte finish*)

Approved Date: N/A

Uniform Good Color (Regular)
Non-Uniform Fair Color (Regular)
Uniform Fair Color (Regular)
Non-Uniform Good Color (Regular)
Uniform Good Color (Pardina)
Uniform Fair Color (Pardina)
Non-Uniform Good Color (Pardina)
Non-Uniform Fair Color (Pardina)

GREEN LENTILS (*clear finish*)

Approved Date: 08/17

CORN FLOOD DAMAGE (*clear finish*)

Approved Date: 02/11 or Later

SMOOTH YELLOW DRY PEAS (*clear finish*)

Approved Date: 07/14

Good Color
Fair Color