

# Visual Reference Catalog

October 2011



United States Department of Agriculture  
Grain Inspection, Packers and Stockyards Administration  
Federal Grain Inspection Service

National Grain Center  
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# Visual Reference Images

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## BARLEY (CLEAR LAMINATE ONLY)

## CURRENT DATE

<b>Page 1</b>	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
<b>Page 2</b>	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
<b>Page 3</b>	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 LAMINATE ONLY)

<b>Page 1</b>	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 LAMINATE ONLY)****CURRENT DATE**

<b>Page 1</b>	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
<b>Page 2</b>	(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
<b>Page 3</b>	C-5.0 HEAT DAMAGE (DRIER)	05/02
	C-10.0 SURFACE MOLD (BLIGHT)	05/02
	C-7.7 MIXED CORN (MORE THAN SLIGHT TINGE-PINK)	05/02
	C-7.71 MIXED CORN (PURPLE PIGMENTED CORN)	05/02
<b>Page 4</b>	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
<b>Page 5</b>	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
<b>Page 6</b>	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 & 05/09

**EDIBLE BEAN****CURRENT DATE**

<b>Page 1</b>	<u>BEAN-1.0 BADLY DAMAGED</u>	03/04
	<u>BEAN-2.0 CLEAN-CUT WEEVIL-BORED</u>	03/09
	<u>BEAN-2.1 VISIBLE WINDOW DAMAGE (WEEVIL)</u>	03/09
	<u>BEAN-3.0 DIRT AND GRIME PEA BEANS (NOT DAMAGE)</u>	03/04
<b>Page 2</b>	<u>BEAN-3.1 DIRT &amp; GRIME DAMAGE (OTHER THAN PEA BEANS)</u>	03/04
	<u>BEAN-4.0 FROST DAMAGE</u>	03/04
	<u>BEAN-5.0 (GREEN CHICKPEA)</u>	03/04
	<u>BEAN-6.0 INSECT STUNG DAMAGE (BLACKEYE)</u>	03/04
<b>Page 3</b>	<u>BEAN-6.1 INSECT STUNG DAMAGE (OTHER BEANS)</u>	03/04
	<u>BEAN-6.2 INSECT STUNG DAMAGE (WHITE BEANS)</u>	03/04
	<u>BEAN-7.0 INSECT WEBBING OR FILTH</u>	03/09
	<u>BEAN-8.0 WORM EATEN DAMAGE</u>	01/08
<b>Page 4</b>	<u>BEAN-9.0 MOLD DAMAGE</u>	03/04
	<u>BEAN-9.1 MOLD DAMAGE (PINK/BROWN)</u>	04/09
	<u>BEAN-10.0 NIGHTSHADE DAMAGE</u>	04/06
	<u>BEAN-11.0 SPROUT DAMAGE</u>	03/04
<b>Page 5</b>	<u>BEAN-12.0 WATER BLISTERED DAMAGE</u>	04/06
	<u>BEAN-12.1 TIGER STRIPE</u>	03/04
	<u>BEAN-12.2 WATER BLISTERED DAMAGE (PINK BEANS)</u>	03/04
	<u>BEAN-13.0 DAMAGED (PIECES)</u>	03/04
<b>Page 6</b>	<u>BEAN-14.0 INTERNAL (RESPIRATION) DAMAGE</u>	03/04
	<u>BEAN-15.0 MACHINE DAMAGE</u>	03/04

**FLAX (CLEAR LAMINATE ONLY)****CURRENT DATE**

<b>Page 1</b>	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**

<b>Page 1</b>	LEN-1.0 INSECT-STUNG DAMAGE	06/06
	LEN-1.1 BLIGHT (ASCOCHYTA) DAMAGE	12/03
	LEN-1.2 FROST DAMAGE	12/03
	LEN-1.3 HEAT DAMAGE	12/03
<b>Page 2</b>	LEN-1.4 DAMAGED BY HEAT	12/03
	LEN-1.5 MOLD DAMAGE	12/03
	LEN-1.6 SPROUT DAMAGE	12/03
	LEN-1.7 SKINNED	12/03
<b>Page 3</b>	LEN-1.8 DIRT/GRIME	12/03

**OATS (CLEAR LAMINATE ONLY)**

<b>Page 1</b>	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
<b>Page 2</b>	O-3.0 HEAT DAMAGE	10/11
	O-4.0 INSECT DAMAGE	10/11
	O-5.0 SPROUT DAMAGE	10/11

**PEAS (CLEAR LAMINATE ONLY)****CURRENT DATE**

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

**RICE**

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	<u>R-1.2 NON OBJECTIONABLE SEEDS</u>	11/08
	<u>R-2.0 HEAT DAMAGE</u>	11/08
	<u>R-2.1 DAMAGE BY HEAT (STAIN)</u>	09/02
<b>Page 2</b>	<u>R-2.2 LIGHTLY STAINED (NOT DAMAGE)</u>	09/02
	<u>R-2.7 PECKY KERNELS DAMAGE</u>	09/02
	<u>R-2.71 WATER, STAIN, AND PECK DAMAGED (GLUTINOUS RICE)</u>	09/02
	<u>R-7.0 SMUT DAMAGE</u>	09/02

**RYE (CLEAR LAMINATE ONLY)****CURRENT DATE**

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

**SORGHUM (CLEAR LAMINATE ONLY)**

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

**SOYBEANS (CLEAR LAMINATE ONLY)****CURRENT DATE**

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

**SUNFLOWER (CLEAR LAMINATE ONLY)**

<b>Page 1</b>	<u>SS-1.0 DAMAGED BY HEAT</u>	10/11
	<u>SS-2.0 HEAT DAMAGE</u>	10/11
	<u>SS-3.0 SURFACE MOLD</u>	10/11

**WHEAT (CLEAR LAMINATE ONLY)****CURRENT DATE**

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

# General Appearance Prints

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## **SORGHUM**

Date: 02/07 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**

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**

Date: 06/07 or later

Slightly Weathered  
Materially Weathered

## **WHEAT**

Date: 10/07 or later

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

## **HDWH COLOR LINE**

Date: 10/07 or later

## **RICE COLOR**

Date: 10/08 or later

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

## **RICE MILLING DEGREE**

Date: 02/10 or later

Hard Milled  
Well Milled  
Reasonably Well Milled

## **LENTIL**

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)

## **CORN FLOOD DAMAGE**

Date: 02/11 or Later