



Grain Inspection,  
Packers and  
Stockyards  
Administration

Federal Grain  
Inspection  
Service

# 2007 U.S. Grain Exports: Quality Report



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*February 2008*

## Introduction

The *2007 U.S. Grain Exports: Quality Report* is produced by the Federal Grain Inspection Service (FGIS) of the U.S. Department of Agriculture's Grain Inspection, Packers and Stockyards Administration. The report is the result of FGIS' efforts to determine, document, and disseminate critical information regarding U.S. export grain quality.

The 2006 report is the twenty-third edition of this annual summary of export grain quality. The report summarizes the quality of export wheat, corn, soybeans, sorghum, barley, and flaxseed. Canola, mixed grain, rye, and sunflower seed are not included in this year's report; no lots have been reported in the past 3 years.

## Organization of the Report

The report contains chapters addressing export wheat, export corn, export soybeans, and other grains. Each chapter contains:

- \* standards and definitions for each grain,
- \* tables that clearly illustrate all factor result averages at each applicable U.S. grade level, and
- \* factor quality distribution graphs for selected factors.

In addition, an appendix contains figures illustrating select quantity and quality trends over time.

## Methodology

FGIS collects and documents information about export grain shipments in the automated Export Grain Information System (EGIS). This system contains one record for each export lot inspected and/or weighed. In the case of some railcar exports, each record may contain information from several lots which were aggregated to simplify internal reporting. For the purposes of this export quality report, only information from waterborne export shipments were used. Waterborne export shipments represented 89 percent of the total export lots in the EGIS database for 2007.

Generally, each EGIS record contains the quantity of the lot and the average factor results certified for the lot. The tables in this report contain descriptive statistics which summarize these lot quantities and the weighted averages. Where appropriate, tables are provided which show the number of lots and the quantity of grain which was used to generate the descriptive statistics. Many of the tables summarize factor averages by grade.

A U.S. grade is determined by analyzing the physical and biological factors present in the sample. Limits for the grading factors are established for each numerical grade. Grades range from U.S. No. 1 (highest) to U.S. Sample grade (lowest). When a particular grade is cited in this report, it includes lots certified at that grade plus lots certified with the "or better" designation. For example, U.S. No. 2 grade includes lots which were certificated as "U.S. No. 2" and lots certificated as "U.S. No. 2 or better." Factors that exceed the established limits, except for test weight, lower the grade. The established limits for test weight represent minimum requirements for each grade.

This report does not contain data on the volume of export grain in bushels. Listed below are the equations for converting the approximate quantity of grain from metric tons to bushels.

### ConversionEquation

$$\text{Bushels} = \frac{\text{Metric Tons} \times 2204.622 \text{ Pounds}}{\text{Legal Test Weight/Bushel of Grain}}$$

#### Legal Test Weight Per Bushel for Specific Grains

<b>Wheat=</b>	60 pounds/bushel
<b>Corn=</b>	56 pounds/bushel
<b>Soybeans=</b>	60 pounds/bushel
<b>Canola=</b>	50 pounds/bushel
<b>Sorghum=</b>	56 pounds/bushel
<b>Barley=</b>	48 pounds/bushel
<b>Sunflower Seed=</b>	28 pounds/bushel
<b>Rye=</b>	56 pounds/bushel
<b>Oats=</b>	32 pounds/bushel



# Export Wheat

## Wheat Grades and Grade Requirements

Wheat is divided into eight classes: Hard Red Spring wheat, Hard Red Winter wheat, Soft Red Winter wheat, Durum wheat, Hard White wheat, Soft White wheat, Unclassed wheat, and Mixed wheat. The classes Hard Red Spring wheat, Soft White wheat, and Durum wheat are further divided into subclasses. There are no subclasses in the classes Hard Red Winter wheat, Soft Red Winter wheat, Hard

White wheat, Unclassed wheat, and Mixed wheat. Each class and subclass is divided into five U.S. numerical grades and U.S. Sample grade. Special grades are provided to emphasize special qualities or conditions affecting the value of wheat. Special grades are added to and made a part of the grade designation. They do not affect the numerical or Sample grade designation.

## U.S. Standards for Wheat

Grade	Minimum limits of --		Maximum limits of --						
	Test weight per bushel		Damaged kernels		Foreign Material	Shrunken and broken kernels	Defects <sup>3</sup> (total)	Wheat of other classes <sup>4</sup>	
	Hard Red Spring wheat or White Club wheat <sup>1</sup> (pounds)	All other classes and subclasses (pounds)	Heat-damaged kernels (percent)	Total <sup>2</sup> (percent)				Contrasting classes (percent)	Total <sup>5</sup> (percent)
U.S. No. 1	58.0	60.0	0.2	2.0	0.4	3.0	3.0	1.0	3.0
U.S. No. 2	57.0	58.0	0.2	4.0	0.7	5.0	5.0	2.0	5.0
U.S. No. 3	55.0	56.0	0.5	7.0	1.3	8.0	8.0	3.0	10.0
U.S. No. 4	53.0	54.0	1.0	10.0	3.0	12.0	12.0	10.0	10.0
U.S. No. 5	50.0	51.0	3.0	15.0	5.0	20.0	20.0	10.0	10.0
U.S. Sample grade									

U.S. Sample grade is wheat that:

- (a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or
- (b) Contains 32 or more insect-damaged kernels per 100 grams of wheat, or
- (c) Contains 4 or more stones or any number of stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 1 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria spp.*), 2 or more castor beans (*Ricinus communis L.*), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 2 or more rodent pellets, bird dropping, or an equivalent quantity of other animal filth, five or more pieces of animal filth, castor beans, crotalaria seeds, glass, stones, or unknown foreign substances, in combination, per 1,000 grams of wheat; or
- (d) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
- (e) Is heating or otherwise of distinctly low quality.

<sup>1</sup> These requirements also apply when Hard Red Spring or White Club wheat predominates in a sample of Mixed wheat.

<sup>2</sup> Includes heat-damaged kernels.

<sup>3</sup> Defects include damaged kernels (total), foreign material, and shrunken and broken kernels. The sum of these three factors may not exceed the limit for defects for each numerical grade.

<sup>4</sup> Unclassed wheat of any grade may contain not more than 10.0 percent of wheat of other classes.

<sup>5</sup> Includes contrasting classes.

## **Wheat**

### **Definitions**

**Test weight (lb/bu)** is pounds of grain per Winchester bushel, determined by an approved device after the removal of dockage.

**Test weight (kg/hl)** is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated as follows:

For **Durum** wheat, multiply pounds per bushel by 1.292 and add 0.630. For **all other classes of wheat**, multiply pounds per bushel by 1.292 and add 1.419.

**Heat-damaged kernels** are kernels, pieces of wheat kernels, and other grains which have been materially discolored and damaged by heat.

**Damaged kernels (total)** are kernels, pieces of wheat kernels, and other grains that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, heat-damaged, insect bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

**Foreign material** is all matter other than wheat which remains in a sample after removal of dockage and shrunken and broken kernels.

**Shrunken and broken kernels** are kernels, kernel pieces, and other matter that pass through a 0.064-by 3/8-inch oblong-hole sieve.

**Total defects** are the sum of three factors: damaged kernels (total), shrunken and broken kernels, and foreign material. In the factor summary tables, the average values listed for total defects may not equal the sum of the component factor averages due to rounding.

**Dockage** includes all matter other than wheat that can be removed from the original sample by use of an approved device. The percentage of dockage in a sample does not affect the numerical grade.

**Moisture** is the water content of grain as determined by an approved electronic moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

**Contrasting classes** include:

- \* Durum, Soft White, and Unclassed wheats in the classes Hard Red Spring and Hard Red Winter wheats.
- \* Hard Red Spring, Hard Red Winter, Hard White, Soft Red Winter, Soft White, and Unclassed wheats in the class Durum wheat.
- \* Durum and Unclassed wheats in the class Soft Red Winter wheat.
- \* Durum, Hard Red Spring, Hard Red Winter, Soft Red Winter and Unclassed wheats in the classes Hard White wheat and Soft White wheat.

**Wheat of other classes** is any class that is mixed with the predominant class.

**Protein** is the protein content of grain as determined by an approved near infrared transmittance (NIRT) instrument calibrated against a Combustion Nitrogen Analyzer, or CNA (percent nitrogen multiplied by 5.7). The percentage of protein in a sample does not affect the numerical grade. Protein is certified on a 12 percent moisture basis.

**Mixed wheat** is a combination of classes of wheat which does not meet the minimum requirements of a specific class.

**Table 1. U.S. Wheat Exports: Number of lots and quantity exported by class and grade, 2005-2007**

Class	Grade	2005		2006		2007	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
<b>Hard Red Winter Wheat</b>	<b>U.S. No. 1</b>	76	533,475	75	467,741	79	559,364
	<b>U.S. No. 2</b>	658	9,499,312	466	6,937,258	643	10,897,995
	<b>U.S. No. 3</b>	3	6,658	—	—	1	2,750
	<b>Not Inspected</b>	—	—	—	—	1	25,136
	<b>All lots</b>	737	10,039,445	541	7,404,999	724	11,485,245
<b>Hard Red Spring Wheat</b>	<b>U.S. No. 1</b>	129	1,327,996	121	1,084,861	130	1,474,784
	<b>U.S. No. 2</b>	551	6,558,133	439	5,222,860	467	6,077,029
	<b>U.S. No. 3</b>	1	7,753	5	32,404	2	15,921
	<b>U.S. Sample Grade</b>	1	5,700	—	—	—	—
	<b>Not Inspected</b>	—	—	—	—	1	3,971
	<b>All lots</b>	682	7,899,582	565	6,340,125	600	7,571,705
<b>Soft Red Winter Wheat</b>	<b>U.S. No. 1</b>	—	—	1	1,562	—	—
	<b>U.S. No. 2</b>	237	1,676,795	268	2,552,189	405	5,754,081
	<b>U.S. No. 3</b>	34	262,026	9	97,797	6	40,641
	<b>U.S. No. 4</b>	2	18,997	—	—	—	—
	<b>U.S. No. 5</b>	1	6,268	—	—	—	—
	<b>Not Inspected</b>	—	—	1	5,500	—	—
<b>Durum Wheat</b>	<b>All lots</b>	274	1,964,086	279	2,657,048	411	5,794,722
	<b>U.S. No. 1</b>	66	457,784	69	644,971	61	639,101
	<b>U.S. No. 2</b>	43	348,455	40	257,527	39	387,605
	<b>U.S. No. 3</b>	2	19,300	6	90,256	1	17,931
	<b>U.S. No. 4</b>	1	9,172	1	5,000	—	—
	<b>U.S. Sample Grade</b>	—	—	—	—	2	3,412
<b>Soft White Wheat</b>	<b>Not Inspected</b>	2	16,122	—	—	—	—
	<b>All lots</b>	114	850,833	116	997,754	103	1,048,049
	<b>U.S. No. 1</b>	157	677,564	145	640,925	144	754,196
<b>Hard White Wheat</b>	<b>U.S. No. 2</b>	206	4,128,999	215	4,145,569	210	4,042,509
	<b>All lots</b>	363	4,806,563	360	4,786,494	354	4,796,705
	<b>U.S. No. 1</b>	6	11,611	1	10,426	6	33,500
<b>Hard White Wheat</b>	<b>U.S. No. 2</b>	2	22,512	1	9,300	—	—
	<b>U.S. No. 3</b>	1	8,328	—	—	—	—
	<b>U.S. No. 4</b>	5	54,981	—	—	—	—
	<b>All lots</b>	14	97,432	2	19,726	6	33,500

-- = No lots reported in this category.

continued

**Table 1. U.S. Wheat Exports: Number of lots and quantity exported by class and grade, 2005-2007, continued**

Class	Grade	2005		2006		2007	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
<b>All Classes</b>	<b>U.S. No. 1</b>	434	3,008,430	412	2,850,486	420	3,460,945
	<b>U.S. No. 2</b>	1,697	22,234,206	1,429	19,124,703	1,764	27,159,219
	<b>U.S. No. 3</b>	41	304,065	20	220,457	10	77,243
	<b>U.S. No. 4</b>	8	83,150	1	5,000	--	--
	<b>U.S. No. 5</b>	1	6,268	--	--	--	--
	<b>U.S. Sample Grade</b>	2	16,122	1	5,500	2	3,412
	<b>Not Inspected</b>	--	--	--	--	2	29,107
	<b>All lots</b>	2,184	25,657,941	1,863	22,206,146	2,198	30,729,926

-- = No lots reported in this category.

**Table 2. Summary of export Hard Red Winter wheat quality, 2005-2007**

Factor	Grade	Grade Limit	2005				2006				2007			
			No. of Lots	No. of		No. of Lots	No. of		No. of Lots	No. of		No. of Lots	No. of	
				Avg.	Low		High	Avg.		Low	Avg.		Low	High
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	76	61.9	60.3	63.3	75	62.4	60.3	64.0	79	62.4	60.2	63.9
	<b>U.S. No. 2</b>	58.0	658	61.0	58.5	63.8	466	61.2	58.7	64.0	643	61.0	58.0	64.6
	<b>U.S. No. 3</b>		3	60.0	59.3	61.3	—	—	—	—	1	59.0	59.0	59.0
	<b>All lots</b>	N/A	737	61.0	58.5	63.8	541	61.3	58.7	64.0	723	61.1	58.0	64.6
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	76	81.4	79.3	83.2	75	82.1	79.3	84.1	79	82.0	79.2	84.0
	<b>U.S. No. 2</b>	N/A	658	80.2	77.0	83.8	466	80.5	77.3	84.1	643	80.3	76.4	84.9
	<b>U.S. No. 3</b>	N/A	3	78.9	78.0	80.6	—	—	—	—	1	77.6	77.6	77.6
	<b>All lots</b>	N/A	737	80.3	77.0	83.8	541	80.6	77.3	84.1	723	80.3	76.4	84.9
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	76	10.7	9.4	12.5	75	9.7	8.3	12.2	79	9.4	8.2	11.6
	<b>U.S. No. 2</b>	N/A	658	11.5	8.8	12.9	465	10.9	8.3	12.4	643	11.2	8.4	12.9
	<b>U.S. No. 3</b>	N/A	3	11.9	11.3	12.2	—	—	—	—	1	12.3	12.3	12.3
	<b>All lots</b>	N/A	737	11.4	8.8	12.9	540	10.8	8.3	12.4	723	11.2	8.2	12.9
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	76	0.0	0.0	0.0	75	0.0	0.0	0.1	79	0.0	0.0	0.0
	<b>U.S. No. 2</b>	0.2	658	0.0	0.0	0.1	466	0.0	0.0	0.2	643	0.0	0.0	0.2
	<b>U.S. No. 3</b>	0.5	3	0.0	0.0	0.1	—	—	—	—	1	0.0	0.0	0.0
	<b>All lots</b>	N/A	737	0.0	0.0	0.1	541	0.0	0.0	0.2	723	0.0	0.0	0.2
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	76	0.2	0.0	1.2	75	0.2	0.0	1.4	79	0.1	0.0	0.4
	<b>U.S. No. 2</b>	4.0	658	1.1	0.0	3.4	466	0.8	0.0	2.3	643	1.0	0.0	3.0
	<b>U.S. No. 3</b>	7.0	3	1.4	0.5	4.1	—	—	—	—	1	1.1	1.1	1.1
	<b>All lots</b>	N/A	737	1.0	0.0	4.1	541	0.8	0.0	2.3	723	0.9	0.0	3.0
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	76	0.1	0.0	0.4	75	0.1	0.0	0.3	79	0.1	0.0	0.3
	<b>U.S. No. 2</b>	0.7	658	0.2	0.0	0.7	466	0.2	0.0	0.6	643	0.2	0.0	0.7
	<b>U.S. No. 3</b>	1.3	3	0.3	0.2	0.4	—	—	—	—	1	0.2	0.2	0.2
	<b>All lots</b>	N/A	737	0.2	0.0	0.7	541	0.2	0.0	0.6	723	0.2	0.0	0.7
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	76	1.4	0.7	2.0	75	1.4	0.2	2.3	79	1.4	0.5	2.6
	<b>U.S. No. 2</b>	5.0	658	1.5	0.5	2.4	466	1.6	0.0	2.5	643	1.6	0.9	2.6
	<b>U.S. No. 3</b>	8.0	3	1.9	1.6	2.6	—	—	—	—	1	1.8	1.8	1.8
	<b>All lots</b>	N/A	737	1.5	0.5	2.6	541	1.6	0.0	2.5	723	1.6	0.5	2.6
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	76	1.8	0.8	2.8	75	1.7	0.4	2.7	79	1.6	0.6	2.7
	<b>U.S. No. 2</b>	5.0	658	2.8	1.1	4.7	466	2.7	0.0	4.3	643	2.7	1.0	4.9
	<b>U.S. No. 3</b>	8.0	3	3.5	2.6	6.4	—	—	—	—	1	3.1	3.1	3.1
	<b>All lots</b>	N/A	737	2.8	0.8	6.4	541	2.6	0.0	4.3	723	2.7	0.6	4.9
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	76	0.3	0.1	0.4	75	0.3	0.1	0.5	79	0.3	0.1	0.3
	<b>U.S. No. 2</b>	N/A	658	0.6	0.1	1.2	464	0.6	0.1	1.3	643	0.6	0.1	1.0
	<b>U.S. No. 3</b>	N/A	3	1.0	0.8	1.4	—	—	—	—	1	0.6	0.6	0.6
	<b>All lots</b>	N/A	737	0.6	0.1	1.4	539	0.6	0.1	1.3	723	0.6	0.1	1.0

continued

**Table 2. Summary of export Hard Red Winter wheat quality, 2005-2007--Continued**

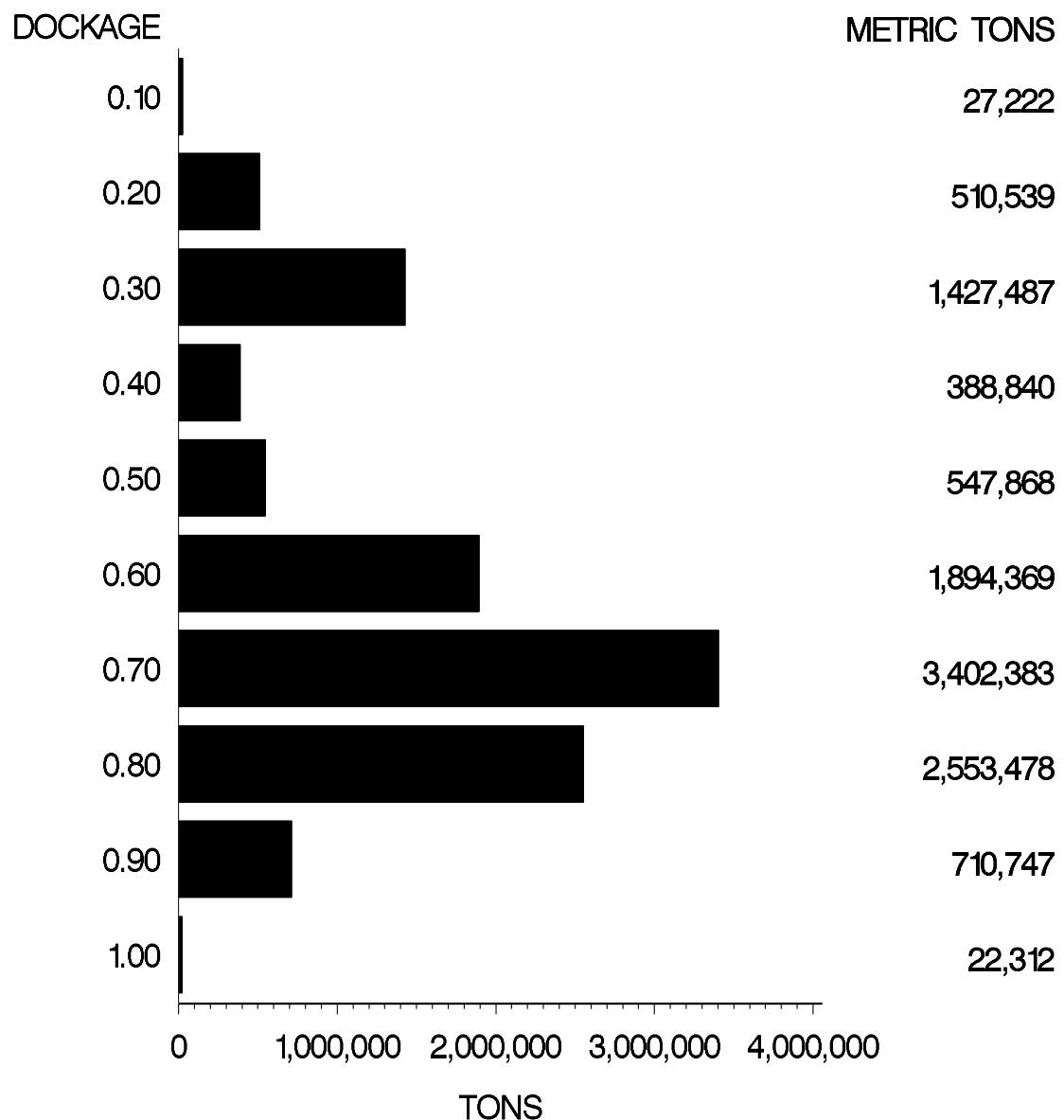
Factor	Grade	Grade Limit	2005			2006			2007		
			No. of Lots	No. of Lots		No. of Lots	No. of Lots		No. of Lots	No. of Lots	
				Avg.	Low	High	Avg.	Low	High	Avg.	Low
<b>Wheat of Other Classes</b>	<b>U.S. No. 1</b>	3.0	76	0.9	0.0	2.5	75	1.0	0.0	2.1	79
	<b>U.S. No. 2</b>	5.0	658	1.1	0.0	4.9	466	1.4	0.0	4.2	643
	<b>U.S. No. 3</b>	10.0	3	2.1	0.1	6.5	--	--	--	--	1
	<b>All lots</b>	N/A	737	1.1	0.0	6.5	541	1.4	0.0	4.2	723
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	76	0.3	0.0	0.9	75	0.3	0.0	1.0	79
	<b>U.S. No. 2</b>	2.0	658	0.3	0.0	1.9	466	0.4	0.0	1.8	643
	<b>U.S. No. 3</b>	3.0	3	0.2	0.0	0.5	--	--	--	--	1
	<b>All lots</b>	N/A	737	0.3	0.0	1.9	541	0.4	0.0	1.8	723
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	76	12.6	11.4	13.4	75	12.7	11.7	13.5	79
	<b>U.S. No. 2</b>	N/A	638	12.2	10.5	14.1	455	12.4	10.9	15.3	637
	<b>U.S. No. 3</b>	N/A	3	11.8	11.7	12.2	--	--	--	--	1
	<b>All lots</b>	N/A	717	12.2	10.5	14.1	530	12.4	10.9	15.3	717
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	76	12.4	11.5	13.2	75	12.4	11.5	13.5	79
	<b>U.S. No. 2</b>	N/A	638	12.1	10.4	14.0	456	12.2	10.8	15.1	637
	<b>U.S. No. 3</b>	N/A	3	11.8	11.7	12.1	--	--	--	--	1
	<b>All lots</b>	N/A	717	12.1	10.4	14.0	531	12.2	10.8	15.1	717

N/A = Does not apply.

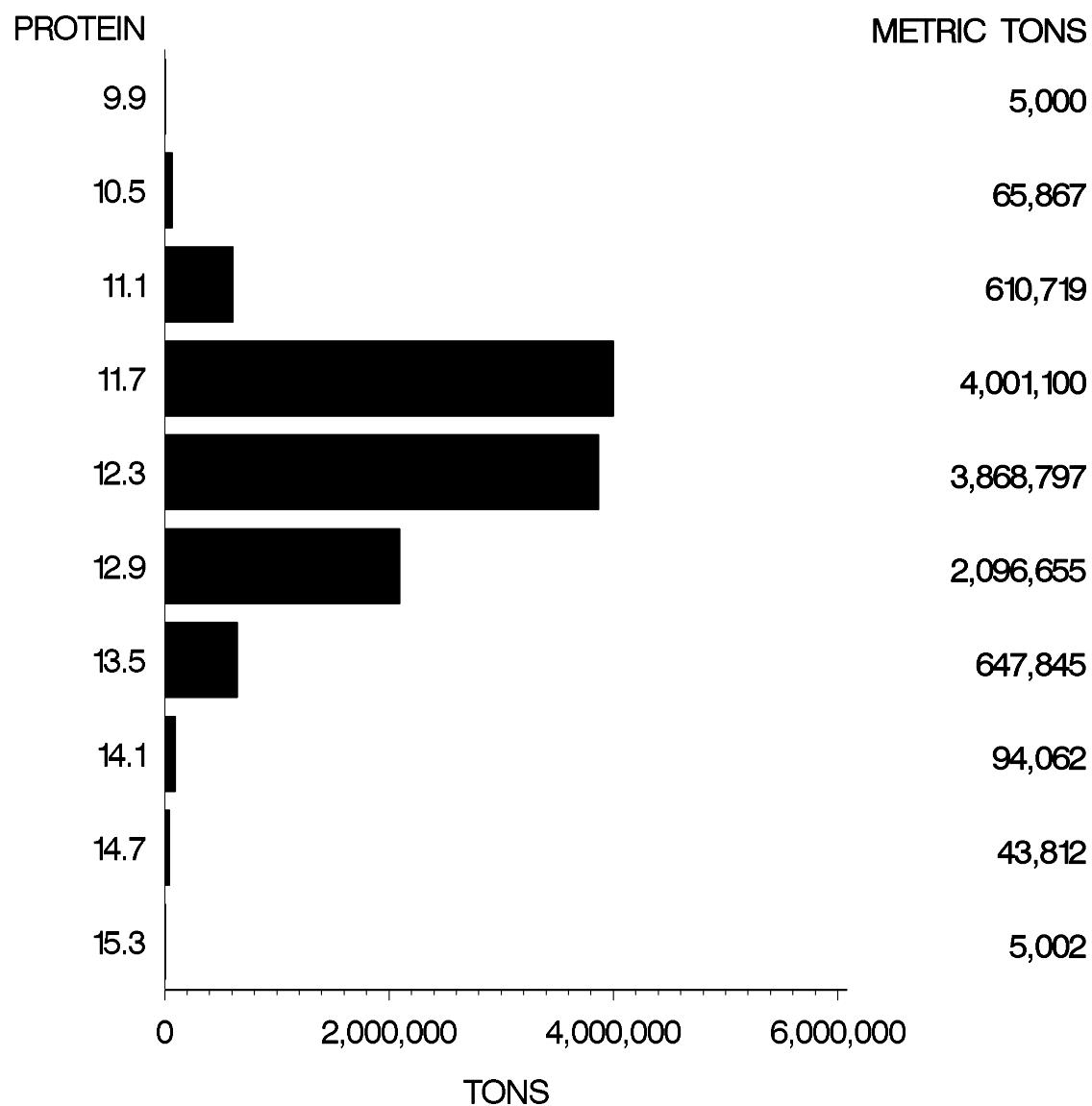
-- = No lots reported in this category.

<sup>1</sup>The sum of the component factor averages may not equal the average for this factor due to rounding.

**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**HRW**



**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**HRW**



**Table 3. Summary of export Hard Red Spring wheat quality, 2005-2007**

Factor	Grade	2005						2006						2007					
		Grade Limit	No. of Lots			No. of Lots			No. of Lots			No. of Lots							
			Avg.	Low	High	Avg.	Low	High	Avg.	Low	High	Avg.	Low	High					
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	58.0	127	61.3	60.0	62.5	119	61.0	59.8	63.2	130	61.2	59.3	63.3					
	<b>U.S. No. 2</b>	57.0	550	61.2	58.9	63.0	439	61.1	58.5	63.0	467	61.4	58.5	63.0					
	<b>U.S. No. 3</b>	55.0	1	61.2	61.2	61.2	5	60.4	59.8	60.8	2	61.6	61.3	61.9					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	62.5	62.5	62.5	—	—	—	—	—	—	—	—					
	<b>All lots</b>	N/A	679	61.2	58.9	63.0	563	61.1	58.5	63.2	599	61.3	58.5	63.3					
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	127	80.6	78.9	82.2	119	80.3	78.6	83.1	130	80.5	78.1	83.1					
	<b>U.S. No. 2</b>	N/A	550	80.4	77.5	82.9	439	80.4	77.1	82.9	467	80.7	77.0	82.8					
	<b>U.S. No. 3</b>	N/A	1	80.5	80.5	80.5	5	79.5	78.7	80.0	2	81.0	80.6	81.4					
	<b>U.S. Sample</b>																		
	<b>Grade</b>		1	82.1	82.1	82.1	—	—	—	—	—	—	—	—					
	<b>All lots</b>	N/A	679	80.5	77.5	82.9	563	80.4	77.1	83.1	599	80.7	77.0	83.1					
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	127	12.1	9.6	13.5	119	11.6	8.9	14.0	130	11.5	8.2	13.5					
	<b>U.S. No. 2</b>	N/A	550	12.5	9.5	13.6	439	12.2	8.9	13.8	467	12.0	8.8	13.5					
	<b>U.S. No. 3</b>	N/A	1	13.5	13.5	13.5	5	13.5	13.3	13.9	2	13.0	12.9	13.0					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	13.1	13.1	13.1	—	—	—	—	—	—	—	—					
	<b>All lots</b>	N/A	679	12.4	9.5	13.6	563	12.1	8.9	14.0	599	11.9	8.2	13.5					
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	127	0.0	0.0	0.0	119	0.0	0.0	0.1	130	0.0	0.0	0.0					
	<b>U.S. No. 2</b>	0.2	550	0.0	0.0	0.1	439	0.0	0.0	0.2	467	0.0	0.0	0.2					
	<b>U.S. No. 3</b>	0.5	1	0.0	0.0	0.0	5	0.0	0.0	0.0	2	0.0	0.0	0.0					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	0.0	0.0	0.0	—	—	—	—	—	—	—	—					
	<b>All lots</b>	N/A	679	0.0	0.0	0.1	563	0.0	0.0	0.2	599	0.0	0.0	0.2					
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	127	0.7	0.0	1.8	119	0.7	0.0	1.9	130	0.3	0.0	1.1					
	<b>U.S. No. 2</b>	4.0	550	1.3	0.0	3.7	439	1.2	0.0	3.7	467	0.7	0.0	2.6					
	<b>U.S. No. 3</b>	7.0	1	1.4	1.4	1.4	5	1.4	0.9	2.9	2	1.6	0.5	2.6					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	17.4	17.4	17.4	—	—	—	—	—	—	—	—					
	<b>All lots</b>	N/A	679	1.2	0.0	17.4	563	1.1	0.0	3.7	599	0.6	0.0	2.6					
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	127	0.1	0.0	0.2	119	0.1	0.0	0.4	130	0.1	0.0	0.3					
	<b>U.S. No. 2</b>	0.7	550	0.1	0.0	0.6	439	0.1	0.0	0.6	467	0.1	0.0	0.5					
	<b>U.S. No. 3</b>	1.3	1	0.2	0.2	0.2	5	0.2	0.1	0.3	2	0.2	0.1	0.2					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	0.2	0.2	0.2	—	—	—	—	—	—	—	—					
	<b>All lots</b>	N/A	679	0.1	0.0	0.6	563	0.1	0.0	0.6	599	0.1	0.0	0.5					
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	127	1.3	0.6	2.2	119	1.5	0.6	2.4	130	1.6	0.6	2.7					
	<b>U.S. No. 2</b>	5.0	550	1.2	0.5	2.5	439	1.4	0.4	2.9	467	1.5	0.7	3.0					
	<b>U.S. No. 3</b>	8.0	1	0.8	0.8	0.8	5	0.8	0.7	1.0	2	1.3	1.1	1.5					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	0.7	0.7	0.7	—	—	—	—	—	—	—	—					
	<b>All lots</b>	N/A	679	1.2	0.5	2.5	563	1.4	0.4	2.9	599	1.5	0.6	3.0					

continued

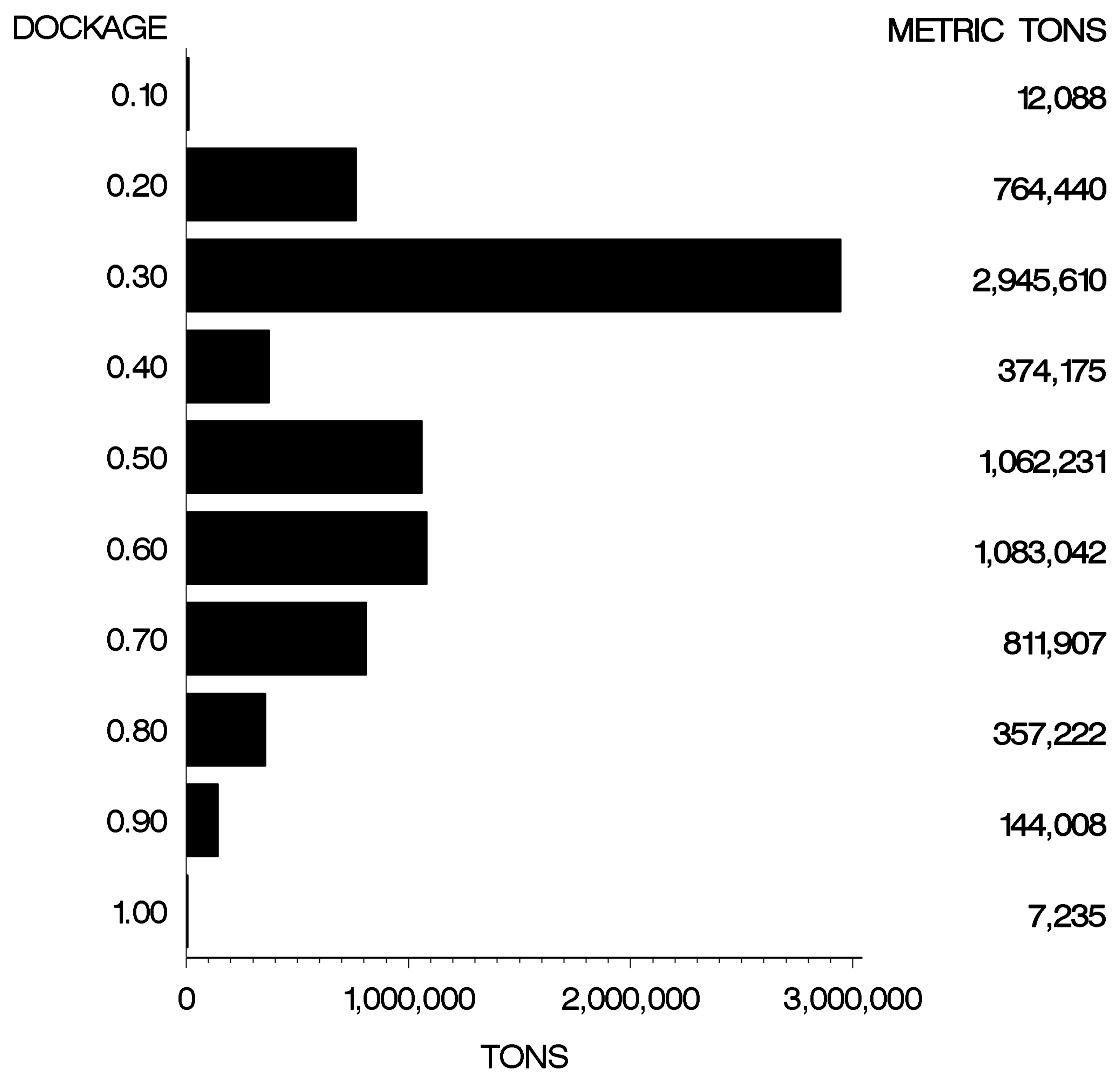
**Table 3. Summary of export Hard Red Spring wheat quality, 2005-2007--Continued**

Factor	Grade	2005						2006						2007					
		Grade Limit	No. of Lots			No. of Lots			No. of Lots			No. of Lots							
			Avg.	Low	High	Avg.	Low	High	Avg.	Low	High	Avg.	Low	High					
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	127	2.1	0.9	3.0	119	2.3	1.1	3.0	130	2.1	1.1	3.0					
	<b>U.S. No. 2</b>	5.0	550	2.6	0.9	4.7	439	2.8	1.2	5.0	467	2.3	1.2	4.3					
	<b>U.S. No. 3</b>	8.0	1	2.4	2.4	2.4	5	2.3	1.8	4.0	2	3.1	2.1	3.9					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	18.3	18.3	18.3	—	—	—	—	—	—	—	—					
	<b>All lots</b>	N/A	679	2.5	0.9	18.3	563	2.7	1.1	5.0	599	2.3	1.1	4.3					
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	129	0.3	0.1	0.7	121	0.3	0.1	1.2	129	0.3	0.2	0.9					
	<b>U.S. No. 2</b>	N/A	551	0.4	0.1	1.0	439	0.4	0.1	1.0	467	0.5	0.1	1.0					
	<b>U.S. No. 3</b>	N/A	1	0.2	0.2	0.2	5	0.3	0.3	0.6	2	0.4	0.3	0.5					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	0.4	0.4	0.4	--	--	--	--	--	--	--	--					
	<b>All lots</b>	N/A	682	0.4	0.1	1.0	565	0.4	0.1	1.2	598	0.4	0.1	1.0					
<b>Wheat of Other Classes</b>	<b>U.S. No. 1</b>	3.0	127	0.9	0.0	2.7	119	0.8	0.0	2.7	130	0.7	0.0	2.0					
	<b>U.S. No. 2</b>	5.0	550	1.2	0.0	4.8	439	1.2	0.0	4.8	467	1.0	0.0	4.3					
	<b>U.S. No. 3</b>	10.0	1	0.6	0.6	0.6	5	0.5	0.0	1.2	2	0.9	0.0	1.7					
	<b>U.S. Sample</b>																		
	<b>Grade</b>		1	0.5	0.5	0.5	--	--	--	--	--	--	--	--					
	<b>All lots</b>	N/A	679	1.2	0.0	4.8	563	1.2	0.0	4.8	599	0.9	0.0	4.3					
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	127	0.2	0.0	1.0	119	0.3	0.0	1.0	130	0.2	0.0	0.9					
	<b>U.S. No. 2</b>	2.0	550	0.2	0.0	1.9	439	0.3	0.0	1.8	467	0.2	0.0	1.9					
	<b>U.S. No. 3</b>	3.0	1	0.0	0.0	0.0	5	0.0	0.0	0.2	2	0.3	0.0	0.5					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	0.1	0.1	0.1	--	--	--	--	--	--	--	--					
	<b>All lots</b>	N/A	679	0.2	0.0	1.9	563	0.3	0.0	1.8	599	0.2	0.0	1.9					
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	127	14.0	12.8	14.9	118	14.4	12.9	15.4	128	14.8	13.7	16.9					
	<b>U.S. No. 2</b>	N/A	549	13.7	12.2	15.3	438	14.1	12.2	15.9	463	14.4	13.7	16.3					
	<b>U.S. No. 3</b>	N/A	1	13.0	13.0	13.0	4	12.8	12.3	14.1	1	14.0	14.0	14.0					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	13.7	13.7	13.7	--	--	--	--	--	--	--	--					
	<b>All lots</b>	N/A	678	13.8	12.2	15.3	560	14.1	12.2	15.9	592	14.5	13.7	16.9					
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	127	14.0	13.0	15.1	118	14.3	13.2	15.3	128	14.7	13.8	16.7					
	<b>U.S. No. 2</b>	N/A	549	13.8	12.0	15.3	438	14.1	12.5	15.6	463	14.4	13.8	16.3					
	<b>U.S. No. 3</b>	N/A	1	13.2	13.2	13.2	4	13.1	12.5	14.3	1	14.2	14.2	14.2					
	<b>U.S. Sample</b>																		
	<b>Grade</b>	N/A	1	13.9	13.9	13.9	--	--	--	--	--	--	--	--					
	<b>All lots</b>	N/A	678	13.8	12.0	15.3	560	14.2	12.5	15.6	592	14.5	13.8	16.7					

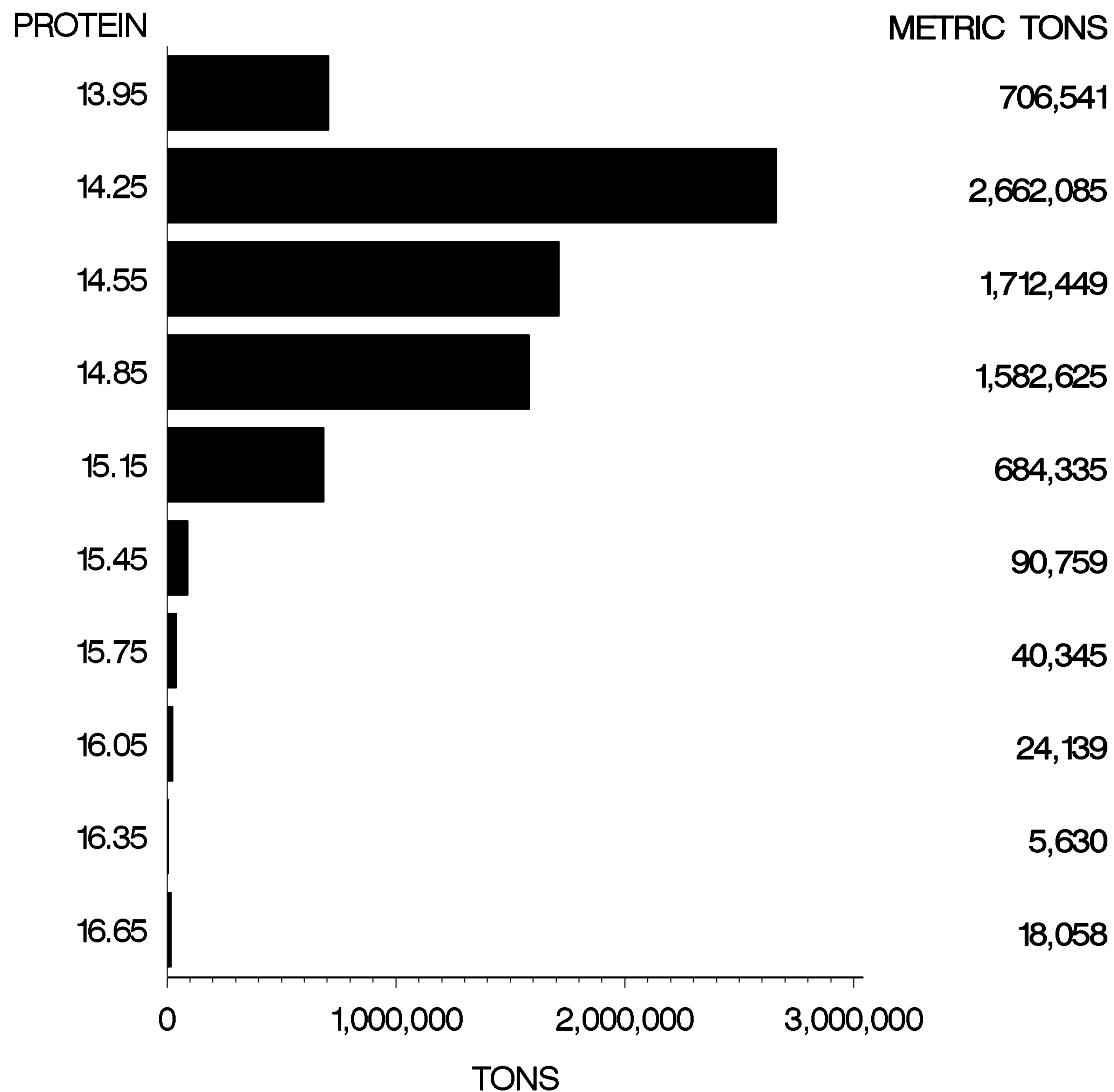
**N/A = Does not apply.**

<sup>1</sup>The sum of the component factor averages may not equal the average for this factor due to rounding.

**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**HRS**



**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**HRS**



**Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 2005-2007**

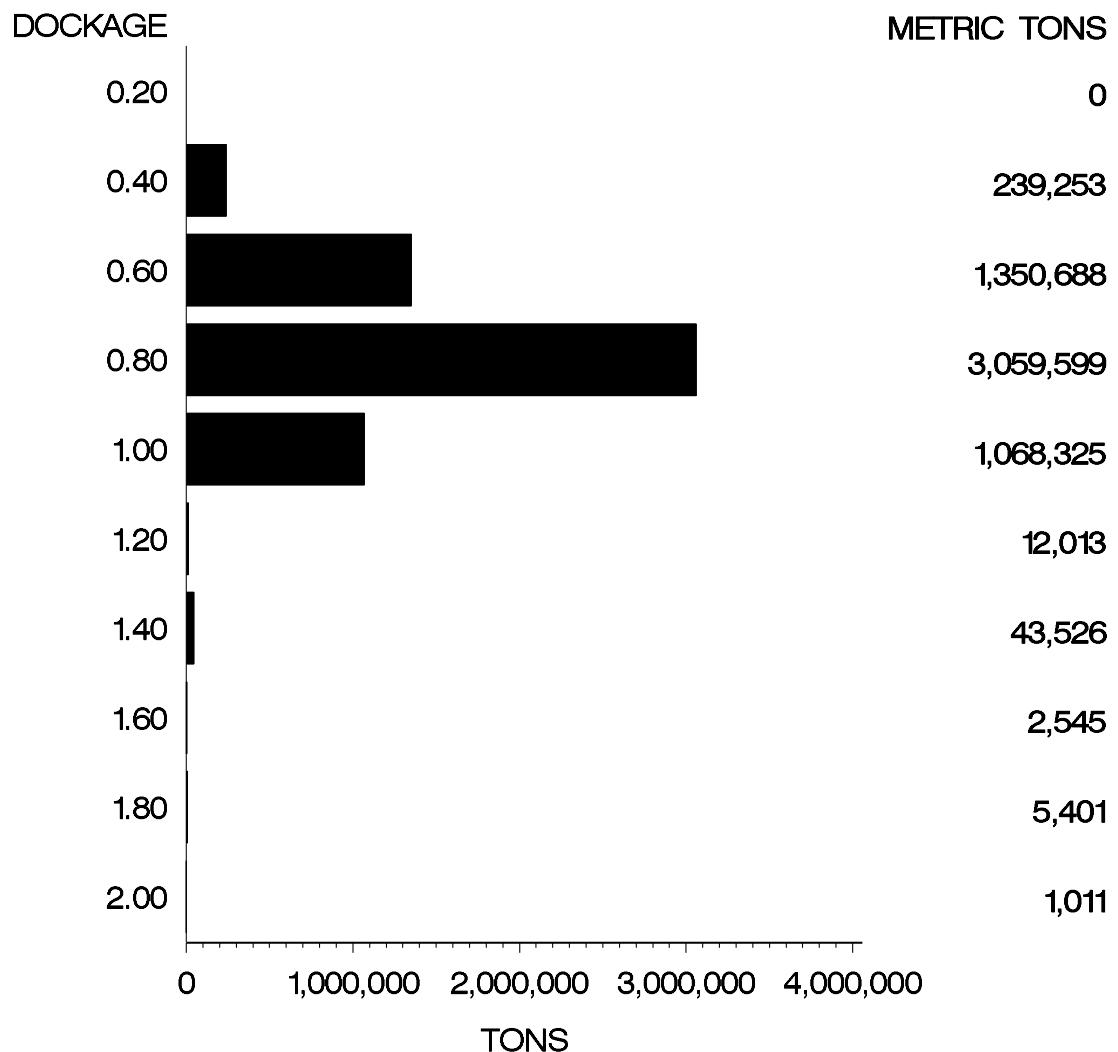
Factor	Grade	Grade Limit	2005			2006			2007		
			No. of Lots			No. of Lots			No. of Lots		
			Avg.	Low	High	Avg.	Low	High	Avg.	Low	High
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	—	—	—	1	60.2	60.2	60.2	—	—
	<b>U.S. No. 2</b>	58.0	237	59.7	58.0	61.4	268	59.8	58.0	62.4	405
	<b>U.S. No. 3</b>	56.0	34	58.0	57.0	60.0	9	60.2	59.4	62.2	6
	<b>U.S. No. 4</b>	54.0	2	58.6	58.2	58.8	—	—	—	—	—
	<b>U.S. No. 5</b>	51.0	1	58.1	58.1	58.1	—	—	—	—	—
	<b>All lots</b>	N/A	274	59.5	57.0	61.4	278	59.8	58.0	62.4	411
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	—	—	—	1	79.2	79.2	79.2	—	—
	<b>U.S. No. 2</b>	N/A	237	78.6	76.4	80.7	268	78.7	76.4	82.1	405
	<b>U.S. No. 3</b>	N/A	34	76.4	75.1	79.0	9	79.2	78.2	81.7	6
	<b>U.S. No. 4</b>	N/A	2	77.2	76.7	77.4	—	—	—	—	—
	<b>U.S. No. 5</b>	N/A	1	76.4	76.4	76.4	—	—	—	—	—
	<b>All lots</b>	N/A	274	78.2	75.1	80.7	278	78.7	76.4	82.1	411
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	—	—	—	1	13.4	13.4	13.4	—	—
	<b>U.S. No. 2</b>	N/A	237	13.1	12.4	13.5	268	12.9	12.1	13.5	405
	<b>U.S. No. 3</b>	N/A	34	13.0	12.6	13.5	9	12.8	12.7	13.0	6
	<b>U.S. No. 4</b>	N/A	2	13.0	13.0	13.0	—	—	—	—	—
	<b>U.S. No. 5</b>	N/A	1	13.4	13.4	13.4	—	—	—	—	—
	<b>All lots</b>	N/A	274	13.1	12.4	13.5	278	12.9	12.1	13.5	411
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	--	--	--	1	0.0	0.0	0.0	—	—
	<b>U.S. No. 2</b>	0.2	237	0.0	0.0	0.1	268	0.0	0.0	0.2	405
	<b>U.S. No. 3</b>	0.5	34	0.0	0.0	0.0	9	0.0	0.0	0.1	6
	<b>U.S. No. 4</b>	—	2	0.0	0.0	0.0	—	—	—	—	—
	<b>U.S. No. 5</b>	—	1	0.0	0.0	0.0	—	—	—	—	—
	<b>All lots</b>	N/A	274	0.0	0.0	0.1	278	0.0	0.0	0.2	411
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	--	--	--	1	0.5	0.5	0.5	—	—
	<b>U.S. No. 2</b>	4.0	237	2.5	0.5	4.0	268	2.1	0.4	4.0	405
	<b>U.S. No. 3</b>	7.0	34	3.8	1.0	5.7	9	4.9	1.4	6.3	6
	<b>U.S. No. 4</b>	—	2	5.9	4.9	6.4	—	—	—	—	—
	<b>U.S. No. 5</b>	—	1	8.6	8.6	8.6	—	—	—	—	—
	<b>All lots</b>	N/A	274	2.7	0.5	8.6	278	2.2	0.4	6.3	411
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	—	--	--	1	0.1	0.1	0.1	—	—
	<b>U.S. No. 2</b>	0.7	237	0.1	0.0	0.6	268	0.1	0.0	0.5	405
	<b>U.S. No. 3</b>	1.3	34	0.2	0.1	0.5	9	0.3	0.2	0.4	6
	<b>U.S. No. 4</b>	—	2	0.2	0.1	0.2	—	—	—	—	—
	<b>U.S. No. 5</b>	—	1	0.1	0.1	0.1	—	—	—	—	—
	<b>All lots</b>	N/A	274	0.1	0.0	0.6	278	0.1	0.0	0.5	411
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	--	--	--	1	0.5	0.5	0.5	—	—
	<b>U.S. No. 2</b>	5.0	237	0.8	0.1	2.3	268	0.7	0.3	1.4	405
	<b>U.S. No. 3</b>	8.0	34	1.1	0.4	1.7	9	0.8	0.6	0.9	6
	<b>U.S. No. 4</b>	—	2	1.1	1.0	1.2	—	—	—	—	—
	<b>U.S. No. 5</b>	—	1	0.3	0.3	0.3	—	—	—	—	—
	<b>All lots</b>	N/A	274	0.9	0.1	2.3	278	0.7	0.3	1.4	411

continued

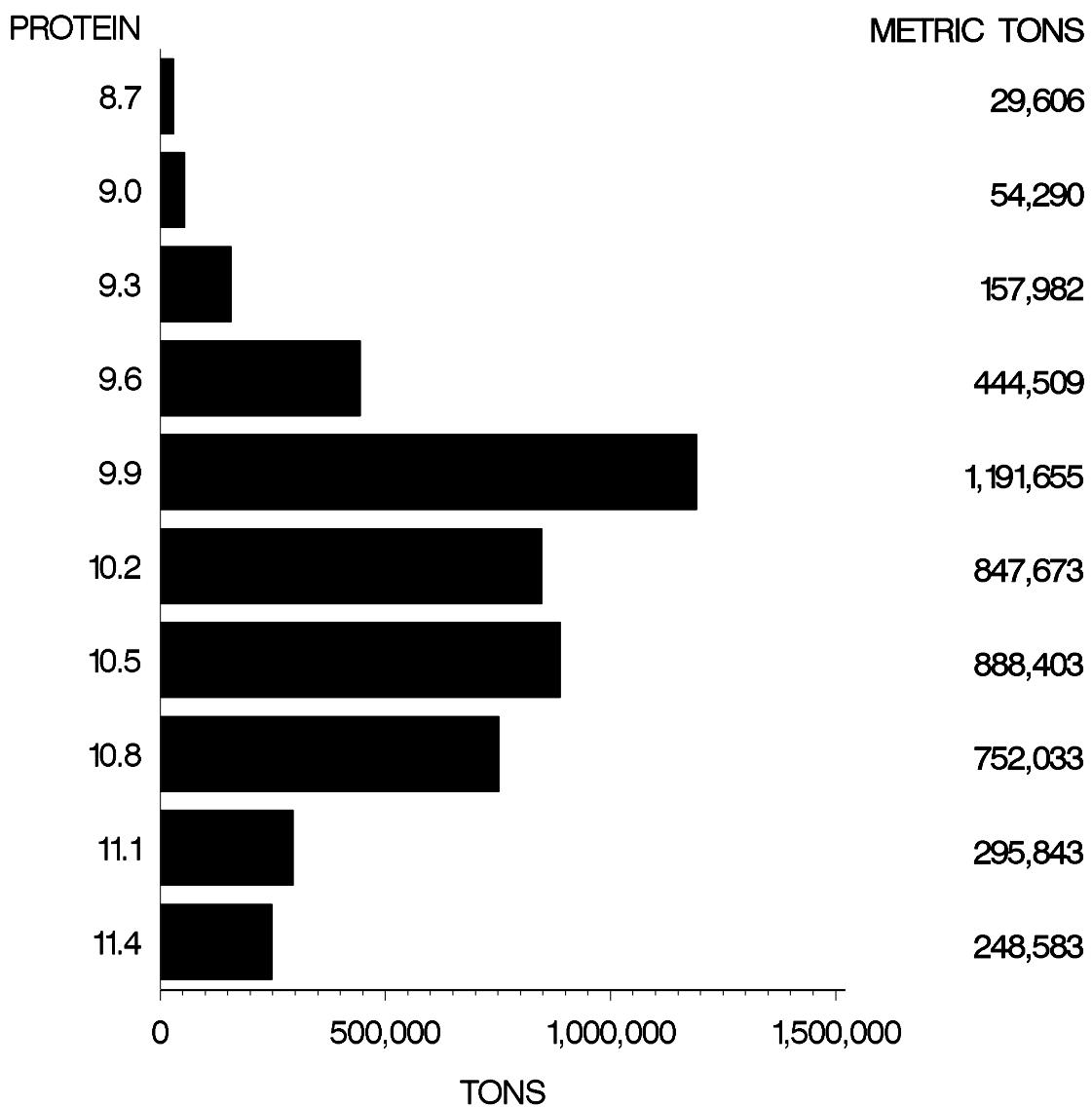
**Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 2005-2007-Continued**

Factor	Grade	Grade Limit	2005				2006				2007			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots	
			U.S. No. 1	U.S. No. 2				U.S. No. 3	U.S. No. 4				All lots	U.S. No. 5
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	—	--	--	--	--	1	1.1	1.1	1.1	—	—	—
	<b>U.S. No. 2</b>	5.0	237	3.4	0.7	5.0	268	2.9	0.9	5.0	405	2.6	0.9	4.6
	<b>U.S. No. 3</b>	8.0	34	5.1	1.5	7.1	9	5.9	2.2	7.3	6	3.5	2.1	5.1
	<b>U.S. No. 4</b>	—	2	7.2	6.2	7.6	—	--	--	--	--	--	--	--
	<b>U.S. No. 5</b>	—	1	9.0	9.0	9.0	—	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	274	3.7	0.7	9.0	278	3.0	0.9	7.3	411	2.6	0.9	5.1
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	1	0.8	0.8	0.8	—	—	—	—
	<b>U.S. No. 2</b>	N/A	237	0.8	0.1	1.4	267	0.7	0.4	1.4	403	0.7	0.3	1.9
	<b>U.S. No. 3</b>	N/A	33	0.9	0.4	1.2	9	0.8	0.7	0.9	6	0.9	0.5	1.3
	<b>U.S. No. 4</b>	N/A	2	0.9	0.9	1.0	—	--	--	--	--	--	--	--
	<b>U.S. No. 5</b>	N/A	1	0.6	0.6	0.6	—	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	273	0.8	0.1	1.4	277	0.8	0.4	1.4	409	0.7	0.3	1.9
<b>Wheat of Other Classes</b>	<b>U.S. No. 1</b>	3.0	—	--	--	--	1	0.0	0.0	0.0	—	—	—	—
	<b>U.S. No. 2</b>	5.0	237	0.5	0.0	4.7	268	0.3	0.0	3.8	405	0.4	0.0	4.3
	<b>U.S. No. 3</b>	10.0	34	0.4	0.0	2.5	9	0.1	0.0	0.3	6	0.3	0.0	0.5
	<b>U.S. No. 4</b>	—	2	0.7	0.7	0.8	—	--	--	--	--	--	--	--
	<b>U.S. No. 5</b>	—	1	0.0	0.0	0.0	—	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	274	0.5	0.0	4.7	278	0.3	0.0	3.8	411	0.4	0.0	4.3
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	--	--	--	--	1	0.0	0.0	0.0	—	—	—	—
	<b>U.S. No. 2</b>	2.0	237	0.0	0.0	1.5	268	0.0	0.0	1.6	405	0.0	0.0	0.7
	<b>U.S. No. 3</b>	3.0	34	0.0	0.0	0.3	9	0.0	0.0	0.0	6	0.0	0.0	0.0
	<b>U.S. No. 4</b>	—	2	0.0	0.0	0.0	—	--	--	--	--	--	--	--
	<b>U.S. No. 5</b>	—	1	0.0	0.0	0.0	—	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	274	0.0	0.0	1.5	278	0.0	0.0	1.6	411	0.0	0.0	0.7
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	1	9.9	9.9	9.9	—	—	—	—
	<b>U.S. No. 2</b>	N/A	210	9.8	9.1	10.5	245	9.8	8.9	11.6	366	10.2	8.6	11.4
	<b>U.S. No. 3</b>	N/A	34	10.2	9.7	10.4	9	9.9	9.5	10.1	2	10.6	10.2	11.1
	<b>U.S. No. 4</b>	—	2	10.1	10.1	10.2	—	--	--	--	--	--	--	--
	<b>U.S. No. 5</b>	—	—	--	--	--	—	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	246	9.9	9.1	10.5	255	9.8	8.9	11.6	368	10.2	8.6	11.4
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	1	10.1	10.1	10.1	—	—	—	—
	<b>U.S. No. 2</b>	N/A	210	9.9	9.2	10.6	245	9.9	9.1	11.7	366	10.3	8.7	11.5
	<b>U.S. No. 3</b>	N/A	34	10.3	9.8	10.5	9	10.0	9.6	10.2	2	10.7	10.3	11.2
	<b>U.S. No. 4</b>	—	2	10.2	10.2	10.3	—	--	--	--	--	--	--	--
	<b>U.S. No. 5</b>	—	—	--	--	--	—	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	246	10.0	9.2	10.6	255	9.9	9.1	11.7	368	10.3	8.7	11.5

**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**SRW**



**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**SRW**



**Table 5. Summary of export Durum wheat quality, factor averages by grade, 2005-2007**

Factor	Grade	Grade Limit	2005			2006			2007		
			No. of Lots	No. of Lots		No. of Lots	No. of Lots		No. of Lots	No. of Lots	
				Avg.	Low	High	Avg.	Low	High		
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	65	62.0	60.3	63.5	68	61.8	60.2	64.1	61
	<b>U.S. No. 2</b>	58.0	43	61.0	59.7	63.0	40	61.2	60.1	63.8	39
	<b>U.S. No. 3</b>	56.0	2	60.4	60.0	60.8	6	60.2	59.3	60.7	1
	<b>U.S. No. 4</b>	54.0	1	60.1	60.1	60.1	1	64.0	64.0	64.0	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	2	63.2
	<b>All lots</b>	N/A	111	61.5	59.7	63.5	115	61.5	59.3	64.1	103
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	65	80.7	78.5	82.6	68	80.5	78.4	83.5	61
	<b>U.S. No. 2</b>	N/A	43	79.5	77.8	82.0	40	79.7	78.3	83.0	39
	<b>U.S. No. 3</b>	N/A	2	78.7	78.2	79.2	6	78.4	77.2	79.1	1
	<b>U.S. No. 4</b>	N/A	1	78.3	78.3	78.3	1	83.4	83.4	83.4	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	2	82.3
	<b>All lots</b>	N/A	111	80.1	77.8	82.6	115	80.1	77.2	83.5	103
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	365	9.4	6.2	13.6	68	11.0	6.6	13.8	61
	<b>U.S. No. 2</b>	N/A	43	12.9	6.8	13.5	40	12.6	8.0	13.9	39
	<b>U.S. No. 3</b>	N/A	2	13.2	13.1	13.2	6	12.7	12.1	13.3	1
	<b>U.S. No. 4</b>	N/A	1	13.3	13.3	13.3	1	8.3	8.3	8.3	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	2	8.3
	<b>All lots</b>	N/A	111	11.0	6.2	13.6	115	11.6	6.6	13.9	103
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	65	0.0	0.0	0.1	68	0.0	0.0	0.0	61
	<b>U.S. No. 2</b>	0.2	43	0.0	0.0	0.1	40	0.0	0.0	0.1	39
	<b>U.S. No. 3</b>	0.5	2	0.2	0.0	0.3	6	0.0	0.0	0.1	1
	<b>U.S. No. 4</b>	1.0	1	0.0	0.0	0.0	1	0.0	0.0	0.0	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	2	0.0
	<b>All lots</b>	N/A	111	0.0	0.0	0.3	115	0.0	0.0	0.1	103
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	65	1.0	0.4	2.0	68	1.0	0.3	1.7	61
	<b>U.S. No. 2</b>	4.0	43	2.6	0.3	4.0	40	1.8	0.4	2.9	39
	<b>U.S. No. 3</b>	7.0	2	3.6	3.3	3.9	6	4.7	3.8	5.4	1
	<b>U.S. No. 4</b>	10.0	1	6.6	6.6	6.6	1	0.6	0.6	0.6	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	2	0.5
	<b>All lots</b>	N/A	111	1.8	0.3	6.6	115	1.6	0.3	5.4	103

N/A = Does not apply.

-- = No lots reported in this category.

continued

**Table 5. Summary of export Durum wheat quality, factor averages by grade, 2005-2007--Continued**

Factor	Grade	Grade Limit	2005				2006				2007			
			No. of Lots	No. of Lots		No. of Lots	No. of Lots		No. of Lots	No. of Lots		No. of Lots	No. of Lots	
				Avg.	Low	High	Avg.	Low	High	Avg.	Low	High		
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	65	0.2	0.0	0.3	68	0.1	0.1	0.4	61	0.1	0.0	0.4
	<b>U.S. No. 2</b>	0.7	43	0.2	0.1	0.3	40	0.2	0.0	0.6	39	0.2	0.1	0.5
	<b>U.S. No. 3</b>	1.3	2	0.2	0.1	0.3	6	0.2	0.2	0.4	1	0.1	0.1	0.1
	<b>U.S. No. 4</b>	3.0	1	0.3	0.3	0.3	1	0.4	0.4	0.4	--	--	--	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	--	2	0.4	0.4	0.4
	<b>All lots</b>	N/A	111	0.2	0.0	0.3	115	0.2	0.0	0.6	103	0.2	0.0	0.5
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	65	0.8	0.2	1.4	68	1.0	0.3	1.8	61	1.1	0.3	1.9
	<b>U.S. No. 2</b>	5.0	43	1.1	0.6	1.5	40	1.3	0.7	1.6	39	1.6	0.8	2.0
	<b>U.S. No. 3</b>	8.0	2	1.2	1.2	1.3	6	1.6	1.5	1.8	1	1.6	1.6	1.6
	<b>U.S. No. 4</b>	12.0	1	1.5	1.5	1.5	1	0.9	0.9	0.9	--	--	--	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	--	2	0.9	0.8	1.0
	<b>All lots</b>	N/A	111	0.9	0.2	1.5	115	1.2	0.3	1.8	103	1.3	0.3	2.0
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	65	2.0	0.8	3.0	68	2.2	1.0	2.9	61	2.1	0.9	3.0
	<b>U.S. No. 2</b>	5.0	43	3.9	1.0	5.0	40	3.3	1.2	4.5	39	3.5	1.7	4.9
	<b>U.S. No. 3</b>	8.0	2	5.0	4.6	5.5	6	6.5	5.6	7.2	1	2.5	2.5	2.5
	<b>U.S. No. 4</b>	12.0	1	8.4	8.4	8.4	1	1.9	1.9	1.9	--	--	--	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	--	2	1.8	1.6	2.1
	<b>All lots</b>	N/A	111	2.9	0.8	8.4	115	2.9	1.0	7.2	103	2.6	0.9	4.9
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	66	0.6	0.1	0.9	69	0.5	0.1	1.0	61	0.5	0.2	1.1
	<b>U.S. No. 2</b>	N/A	43	0.5	0.3	1.0	40	0.5	0.1	1.0	39	0.6	0.3	0.9
	<b>U.S. No. 3</b>	N/A	2	0.6	0.6	0.7	6	0.6	0.4	0.7	1	0.4	0.4	0.4
	<b>U.S. No. 4</b>	N/A	1	0.6	0.6	0.6	1	0.9	0.9	0.9	--	--	--	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	--	2	1.1	1.1	1.2
	<b>All lots</b>	N/A	112	0.6	0.1	1.0	116	0.5	0.1	1.0	103	0.5	0.2	1.2
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	65	0.3	0.0	1.0	68	0.4	0.0	0.8	61	0.4	0.0	1.0
	<b>U.S. No. 2</b>	2.0	43	0.9	0.0	1.9	40	0.8	0.1	1.7	39	1.0	0.1	1.8
	<b>U.S. No. 3</b>	3.0	2	1.2	0.6	1.8	6	1.5	1.0	1.9	1	1.6	1.6	1.6
	<b>U.S. No. 4</b>	10.0	1	1.6	1.6	1.6	1	0.9	0.9	0.9	--	--	--	--
	<b>U.S. Sample Grade</b>	--	--	--	--	--	--	--	--	--	2	1.4	0.6	2.6
	<b>All lots</b>	N/A	111	0.6	0.0	1.9	115	0.6	0.0	1.9	103	0.6	0.0	2.6

N/A = Does not apply.

-- = No lots reported in this category.

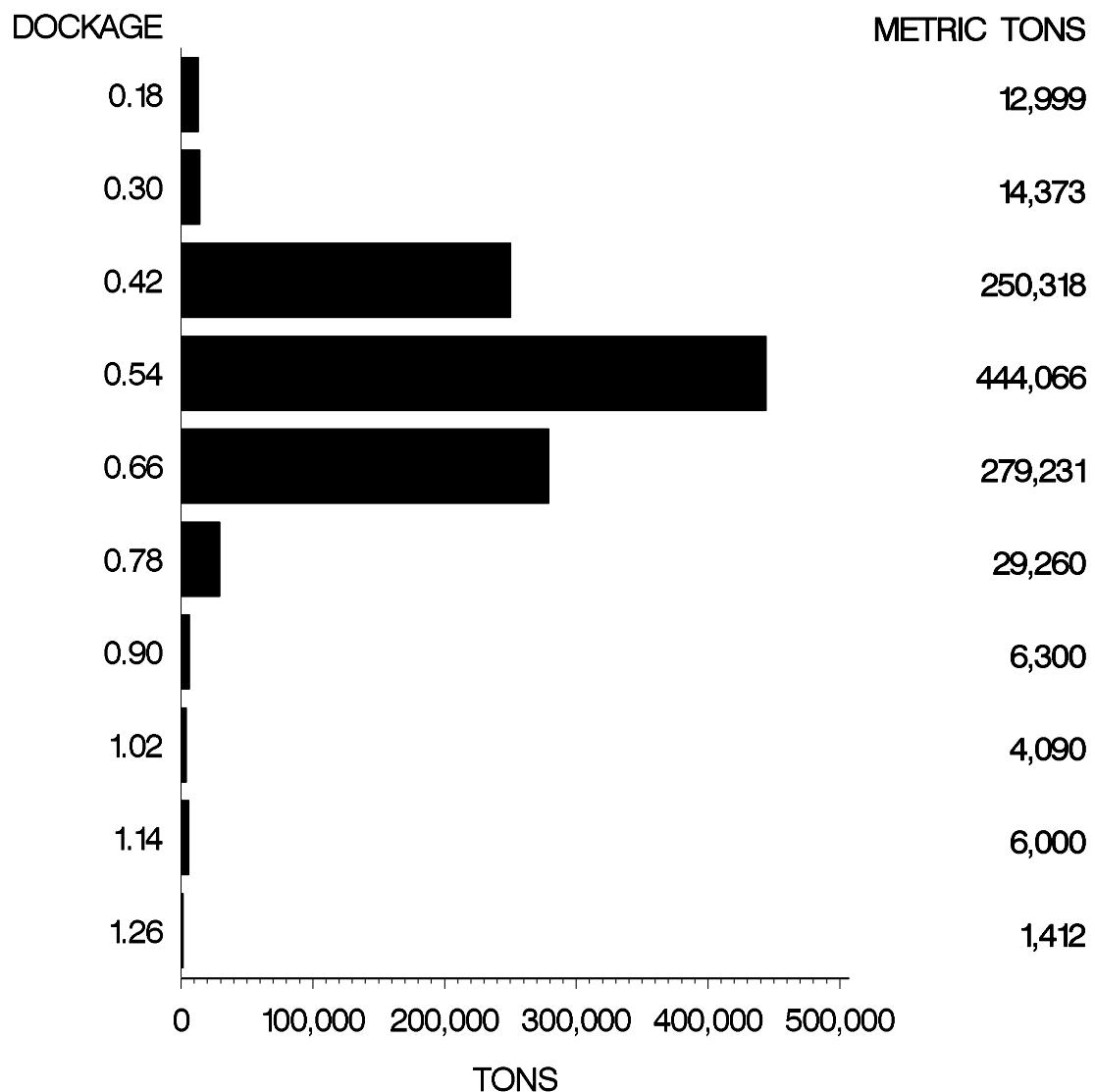
**Table 5. Summary of export Durum wheat quality, factor averages by grade, 2005-2007**

Factor	Grade	Grade Limit	2005				2006				2007						
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			No. of Lots	Avg.				No. of Lots	Avg.				No. of Lots	Avg.			
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	58	14.0	8.3	16.2	49	13.6	11.8	15.7	53	14.3	11.0	15.8			
	<b>U.S. No. 2</b>	N/A	39	12.9	11.6	14.8	32	13.4	11.5	14.7	36	14.4	11.4	15.6			
	<b>U.S. No. 3</b>	N/A	--	--	--	--	6	13.4	12.9	14.0	1	14.8	14.8	14.8			
	<b>U.S. No. 4</b>	N/A	--	--	--	--	1	12.1	12.1	12.1	--	--	--	--			
	<b>U.S. Sample Grade</b>		--	--	--	--	--	--	--	--	2	10.8	10.8	10.9			
	<b>All lots</b>	N/A	97	13.4	8.3	16.2	88	13.5	11.5	15.7	92	14.4	10.8	15.8			
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	58	13.6	7.9	16.2	49	13.4	11.3	15.5	53	14.1	10.5	15.7			
	<b>U.S. No. 2</b>	N/A	39	13.0	11.8	14.0	32	13.5	11.0	14.7	36	14.5	10.9	15.6			
	<b>U.S. No. 3</b>	N/A	--	--	--	--	6	13.5	13.1	14.0	1	14.8	14.8	14.8			
	<b>U.S. No. 4</b>	N/A	--	--	--	--	1	11.6	11.6	11.6	--	--	--	--			
	<b>U.S. Sample Grade</b>		--	--	--	--	--	--	--	--	2	10.4	10.4	10.4			
	<b>All lots</b>	N/A	97	13.3	7.9	16.2	88	13.4	11.0	15.5	92	14.2	10.4	15.7			

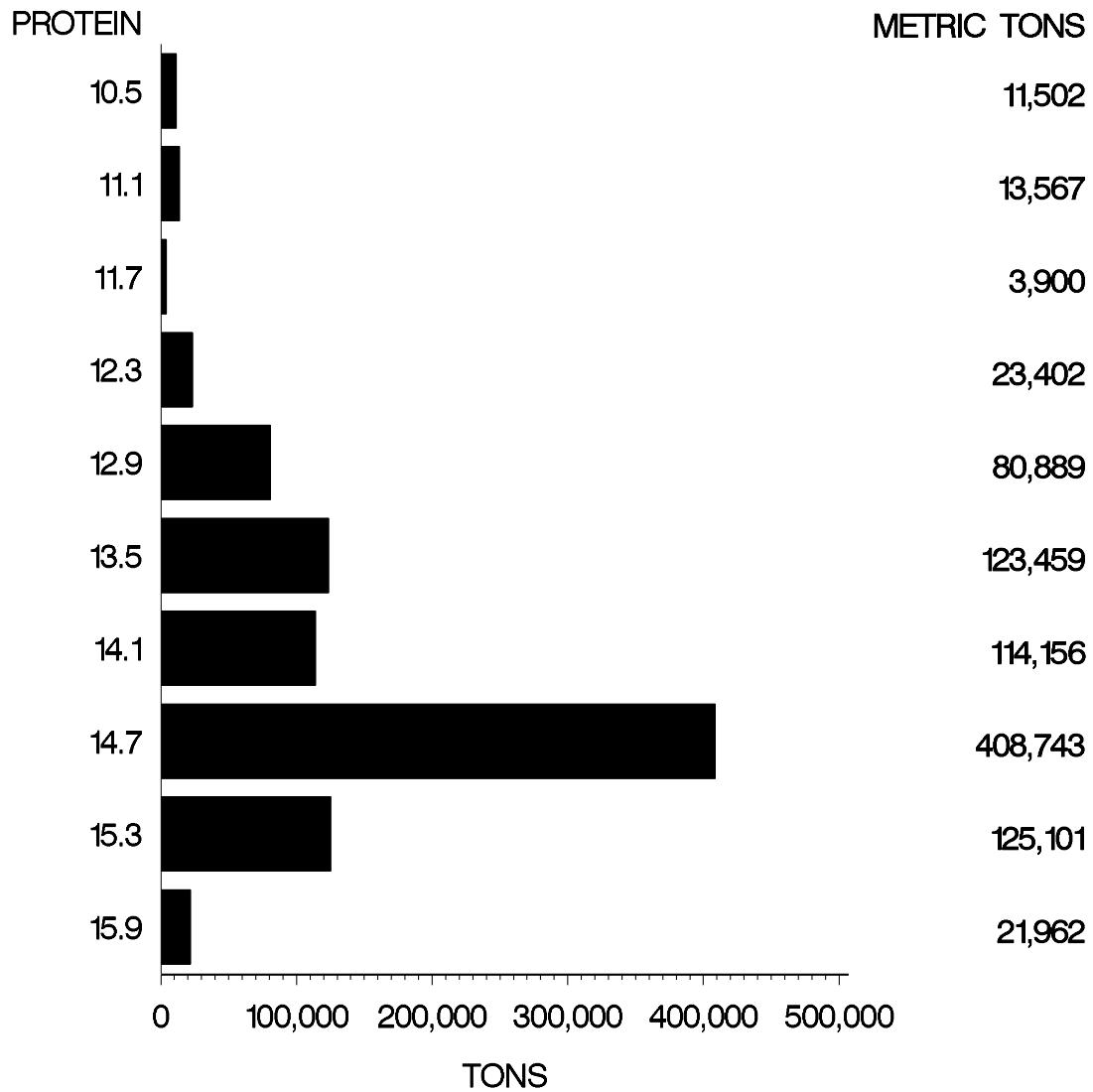
N/A = Does not apply.

-- = No lots reported in this category.

**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**DU**



**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**DU**



**Table 6. Summary of export Soft White wheat quality, factor averages by grade, 2005-2007**

Factor	Grade	Grade Limit	2005				2006				2007						
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			U.S. No. 1	U.S. No. 2				U.S. No. 1	U.S. No. 2				All lots	U.S. No. 1	U.S. No. 2	All lots	
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	157	61.3	60.1	63.6	145	61.6	60.1	63.0	144	61.6	60.1	63.0			
	<b>U.S. No. 2</b>	58.0	205	61.1	59.5	62.6	215	61.6	60.7	63.6	210	61.6	60.0	63.4			
	<b>All lots</b>	N/A	362	61.1	59.5	63.6	360	61.6	60.1	63.6	354	61.6	60.0	63.4			
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	157	80.6	79.1	83.6	145	81.0	79.1	82.9	144	81.0	79.1	82.8			
	<b>U.S. No. 2</b>	N/A	205	80.4	78.3	82.3	215	81.0	79.8	83.6	210	81.0	78.9	83.4			
	<b>All lots</b>	N/A	362	80.4	78.3	83.6	360	81.0	79.1	83.6	354	81.0	78.9	83.4			
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	157	9.6	8.4	11.3	144	9.2	8.6	10.4	144	9.4	8.3	11.5			
	<b>U.S. No. 2</b>	N/A	205	9.3	8.1	10.5	215	9.1	8.2	10.2	210	9.2	8.3	10.8			
	<b>All lots</b>	N/A	362	9.4	8.1	11.3	359	9.1	8.2	10.4	354	9.2	8.3	11.5			
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	157	0.0	0.0	0.0	145	0.0	0.0	0.1	144	0.0	0.0	0.1			
	<b>U.S. No. 2</b>	0.2	205	0.0	0.0	0.0	215	0.0	0.0	0.1	210	0.0	0.0	0.0			
	<b>All lots</b>	N/A	362	0.0	0.0	0.0	360	0.0	0.0	0.1	354	0.0	0.0	0.1			
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	157	0.1	0.0	0.7	145	0.1	0.0	1.4	144	0.1	0.0	1.9			
	<b>U.S. No. 2</b>	4.0	205	0.7	0.0	3.4	215	0.1	0.0	2.5	210	0.1	0.0	2.0			
	<b>All lots</b>	N/A	362	0.6	0.0	3.4	360	0.1	0.0	2.5	354	0.1	0.0	2.0			
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	145	0.1	0.0	0.3	157	0.1	0.0	0.3	144	0.1	0.0	0.4			
	<b>U.S. No. 2</b>	0.7	205	0.1	0.0	0.6	215	0.1	0.0	0.4	210	0.1	0.0	0.4			
	<b>All lots</b>	N/A	362	0.1	0.0	0.6	360	0.1	0.0	0.4	354	0.1	0.0	0.4			
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	157	1.0	0.4	1.8	145	1.0	0.0	1.7	144	1.0	0.5	1.7			
	<b>U.S. No. 2</b>	5.0	205	1.1	0.7	1.6	215	1.1	0.7	1.7	210	1.1	0.5	1.7			
	<b>All lots</b>	N/A	362	1.1	0.4	1.8	360	1.0	0.0	1.7	354	1.1	0.5	1.7			
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	157	1.2	0.4	1.9	145	1.2	0.0	2.3	144	1.2	0.5	2.8			
	<b>U.S. No. 2</b>	5.0	205	1.9	0.9	4.7	215	1.3	0.8	3.6	210	1.3	0.6	3.3			
	<b>All lots</b>	N/A	362	1.8	0.4	4.7	360	1.3	0.0	3.6	354	1.3	0.5	3.3			
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	157	0.3	0.1	0.3	144	0.3	0.1	0.3	144	0.3	0.2	0.3			
	<b>U.S. No. 2</b>	N/A	206	0.4	0.1	0.6	215	0.4	0.1	0.7	210	0.3	0.1	0.8			
	<b>All lots</b>	N/A	363	0.4	0.1	0.6	359	0.3	0.1	0.7	354	0.3	0.1	0.8			
<b>Wheat of Other Classes</b>	<b>U.S. No. 1</b>	3.0	157	0.3	0.0	1.0	145	0.3	0.0	1.1	144	0.3	0.0	2.8			
	<b>U.S. No. 2</b>	5.0	205	0.3	0.0	2.4	215	0.3	0.0	1.3	210	0.4	0.0	2.7			
	<b>All lots</b>	N/A	362	0.3	0.0	2.4	360	0.3	0.0	1.3	354	0.4	0.0	2.8			
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	157	0.3	0.0	1.0	145	0.3	0.0	1.0	144	0.3	0.0	0.9			
	<b>U.S. No. 2</b>	2.0	205	0.3	0.0	1.4	215	0.3	0.0	1.3	210	0.3	0.0	1.3			
	<b>All lots</b>	N/A	362	0.3	0.0	1.4	360	0.3	0.0	1.3	354	0.3	0.0	1.3			

continued

**Table 6. Summary of export Soft White wheat quality, factor averages by grade, 2005-2007--Continued**

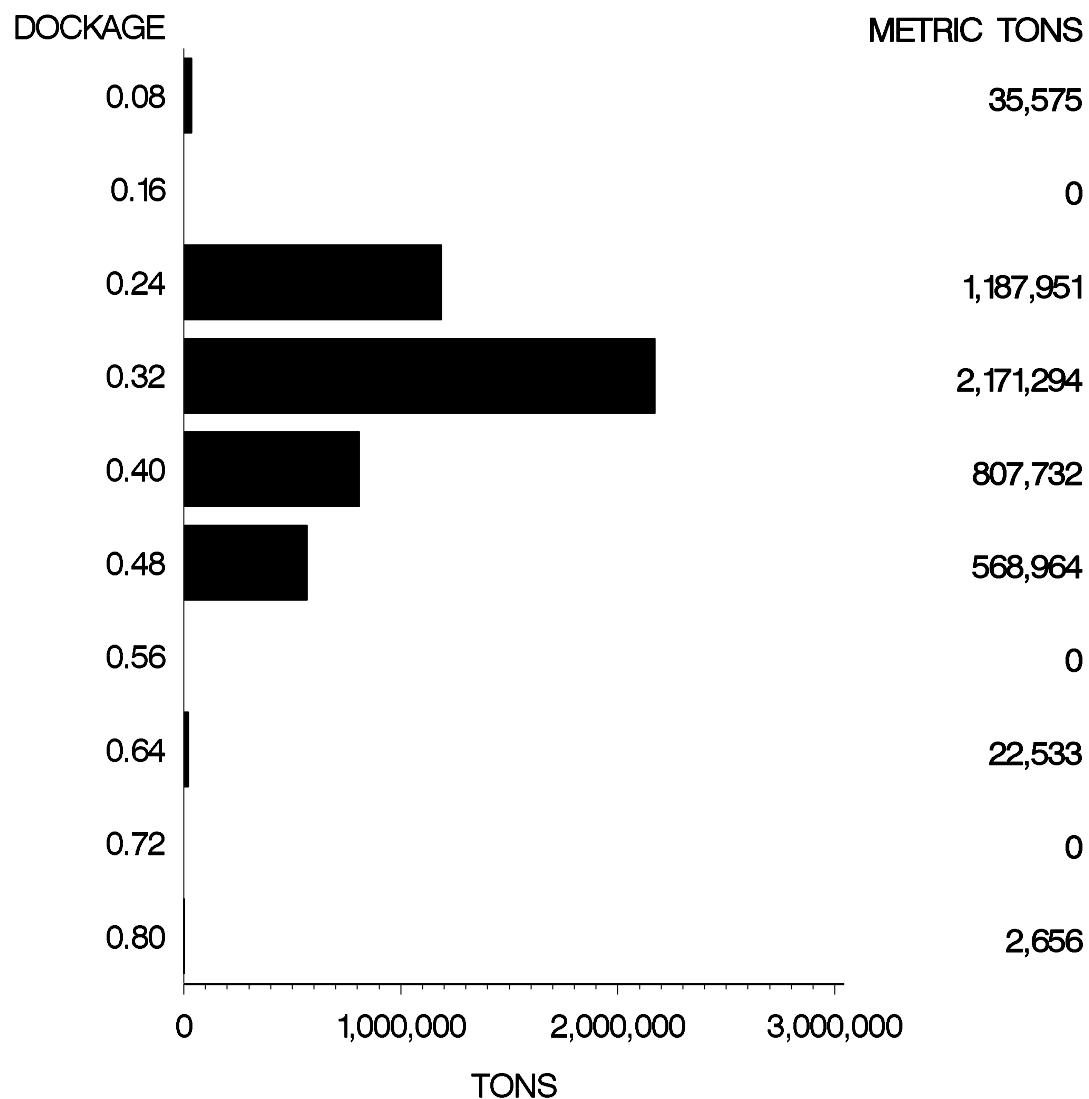
Factor	Grade	Grade Limit	2005				2006				2007						
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			U.S. No. 1	U.S. No. 2				U.S. No. 1	U.S. No. 2				All lots	U.S. No. 1	U.S. No. 2	All lots	
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	155	10.1	8.4	10.9	144	10.0	8.1	11.2	144	10.3	8.3	10.8			
	<b>U.S. No. 2</b>	N/A	187	10.5	9.4	11.4	204	10.3	8.6	11.0	199	10.7	8.6	27.0			
	<b>All lots</b>	N/A	342	10.4	8.4	11.4	348	10.3	8.1	11.2	343	10.6	8.3	27.0			
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	155	9.9	8.1	10.6	144	9.7	7.8	10.9	144	10.0	8.1	10.5			
	<b>U.S. No. 2</b>	N/A	187	10.2	9.2	11.1	204	10.0	8.3	10.6	199	10.4	8.5	26.2			
	<b>All lots</b>	N/A	342	10.1	8.1	11.1	348	10.0	7.8	10.9	343	10.3	8.1	26.2			

N/A = Does not apply.

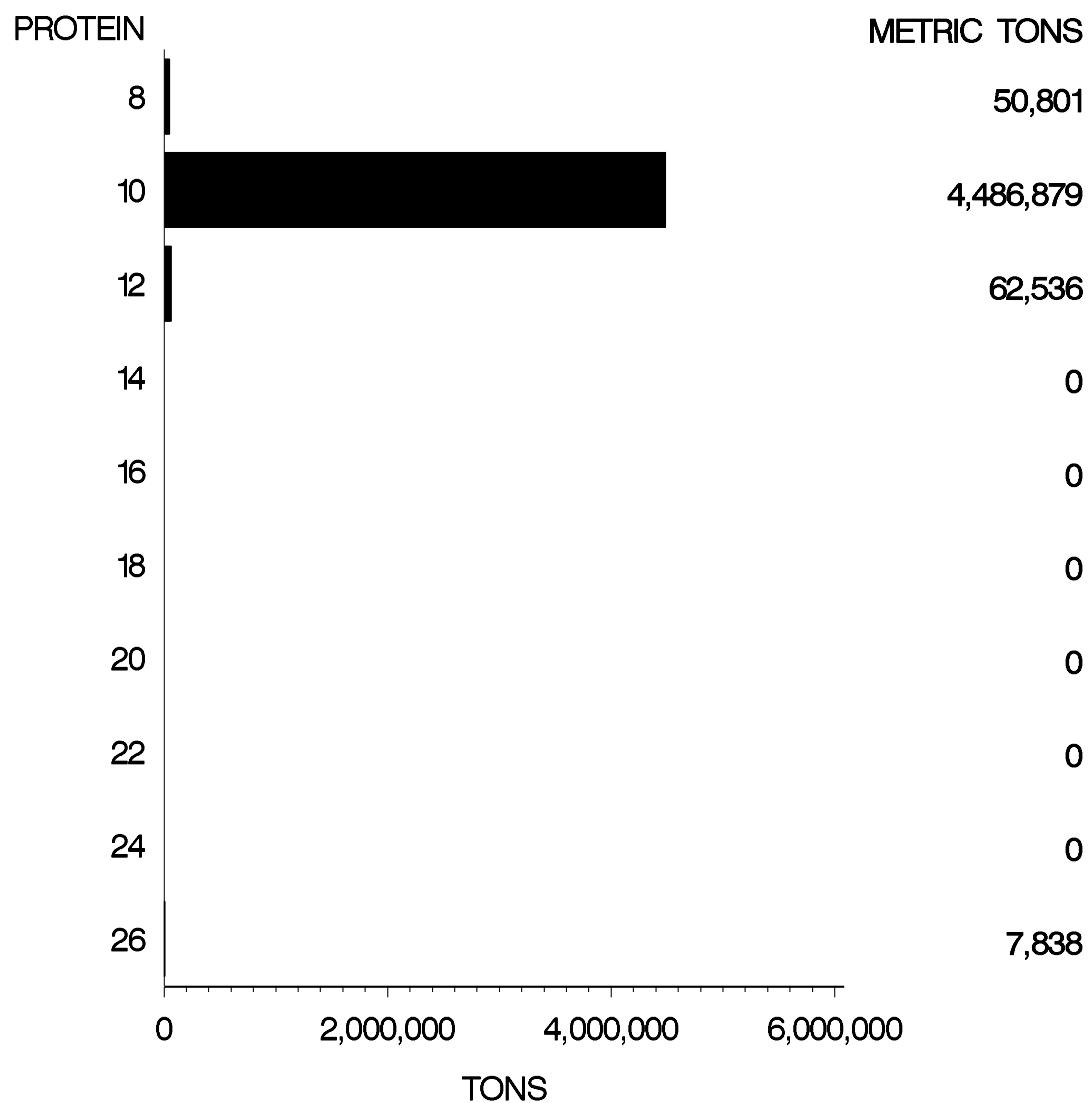
-- = No lots reported in this category.

<sup>1</sup>The sum of the component factor averages may not equal the average for this factor due to rounding.

**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**SWH**



**U.S. WHEAT EXPORTED, 2007**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**SWH**



**Table 7. Summary of export Hard White wheat quality, 2005-2007**

Factor	Grade	Grade Limit	2005			2006			2007			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	6	61.4	60.5	63.1	1	61.4	61.4	61.4	6	62.1
	<b>U.S. No. 2</b>	58.0	2	63.2	61.5	63.3	1	61.2	61.2	61.2	—	—
	<b>U.S. No. 3</b>	56.0	1	60.0	60.0	60.0	—	—	—	—	—	—
	<b>U.S. No. 4</b>	54.0	5	62.1	60.5	63.0	—	—	—	—	—	—
	<b>All lots</b>	N/A	14	62.1	60.0	63.3	2	61.3	61.2	61.4	6	62.1
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	6	80.8	79.5	82.9	1	80.8	80.8	80.8	6	81.7
	<b>U.S. No. 2</b>	N/A	2	83.1	80.9	83.2	1	80.5	80.5	80.5	—	—
	<b>U.S. No. 3</b>	N/A	1	78.9	78.9	78.9	—	—	—	—	—	—
	<b>U.S. No. 4</b>	N/A	5	81.6	79.6	82.8	—	—	—	—	—	—
	<b>All lots</b>	N/A	14	81.6	78.9	83.2	2	80.6	80.5	80.8	6	81.7
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	6	8.6	8.1	8.9	1	9.2	9.2	9.2	6	9.2
	<b>U.S. No. 2</b>	N/A	2	10.8	7.5	10.9	1	10.1	10.1	10.1	—	—
	<b>U.S. No. 3</b>	N/A	1	13.0	13.0	13.0	—	—	—	—	—	—
	<b>U.S. No. 4</b>	N/A	5	11.2	10.4	12.9	—	—	—	—	—	—
	<b>All lots</b>	N/A	14	11.0	7.5	13.0	2	9.6	9.2	10.1	6	9.2
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	6	0.0	0.0	0.0	1	0.0	0.0	0.0	6	0.0
	<b>U.S. No. 2</b>	0.2	2	0.0	0.0	0.0	1	0.0	0.0	0.0	—	—
	<b>U.S. No. 3</b>	0.5	1	0.0	0.0	0.0	—	—	—	—	—	—
	<b>U.S. No. 4</b>	1.0	5	0.0	0.0	0.0	—	—	—	—	—	—
	<b>All lots</b>	N/A	14	0.0	0.0	0.0	2	0.0	0.0	0.0	6	0.0
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	6	0.0	0.0	0.0	1	0.1	0.1	0.1	6	0.1
	<b>U.S. No. 2</b>	4.0	2	2.3	0.0	2.4	1	0.9	0.9	0.9	—	—
	<b>U.S. No. 3</b>	7.0	1	1.2	1.2	1.2	—	—	—	—	—	—
	<b>U.S. No. 4</b>	10.0	5	2.0	0.6	3.1	—	—	—	—	—	—
	<b>All lots</b>	N/A	14	1.8	0.0	3.1	2	0.5	0.1	0.9	6	0.1
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	6	0.1	0.0	0.2	1	0.1	0.1	0.1	6	0.1
	<b>U.S. No. 2</b>	0.7	2	0.1	0.0	0.1	1	0.1	0.1	0.1	—	—
	<b>U.S. No. 3</b>	1.3	1	0.1	0.1	0.1	—	—	—	—	—	—
	<b>U.S. No. 4</b>	3.0	5	0.1	0.1	0.2	—	—	—	—	—	—
	<b>All lots</b>	N/A	14	0.1	0.0	0.2	2	0.1	0.1	0.1	6	0.1
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	6	1.5	0.6	2.0	1	1.6	1.6	1.6	6	1.3
	<b>U.S. No. 2</b>	5.0	2	1.0	1.0	1.0	1	1.3	1.3	1.3	—	—
	<b>U.S. No. 3</b>	8.0	1	0.3	0.3	0.3	—	—	—	—	—	—
	<b>U.S. No. 4</b>	12.0	5	1.1	0.4	1.3	—	—	—	—	—	—
	<b>All lots</b>	N/A	14	1.0	0.3	2.0	2	1.5	1.3	1.6	6	1.3
<b>Total Defects</b>	<b>U.S. No. 1</b>	3.0	6	1.6	0.7	2.1	1	1.8	1.8	1.8	6	1.4
	<b>U.S. No. 2</b>	5.0	2	3.4	1.0	3.5	1	2.3	2.3	2.3	—	—
	<b>U.S. No. 3</b>	8.0	1	1.6	1.6	1.6	—	—	—	—	—	—
	<b>U.S. No. 4</b>	12.0	5	3.2	2.1	4.4	—	—	—	—	—	—
	<b>All lots</b>	N/A	14	2.9	0.7	4.4	2	2.0	1.8	2.3	6	1.4

continued

**Table 7. Summary of export Hard White wheat quality, 2005-2007 -- Continued**

Factor	Grade	Grade Limit	2005				2006				2007			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots	
			No. of Lots	Avg.				No. of Lots	Avg.				Avg.	No. of Lots
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	6	0.3	0.3	0.4	1	0.3	0.3	0.3	6	0.3	0.1	0.3
	<b>U.S. No. 2</b>	N/A	2	0.5	0.2	0.5	1	0.6	0.6	0.6	--	--	--	--
	<b>U.S. No. 3</b>	N/A	1	0.5	0.5	0.5	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	N/A	5	0.5	0.2	0.8	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	14	0.5	0.2	0.8	2	0.4	0.3	0.6	6	0.3	0.1	0.3
<b>Wheat of other Classes</b>	<b>U.S. No. 1</b>	3.0	6	1.2	0.0	2.9	1	1.8	1.8	1.8	6	0.5	0.1	1.0
	<b>U.S. No. 2</b>	5.0	2	1.7	1.4	1.7	1	1.9	1.9	1.9	--	--	--	--
	<b>U.S. No. 3</b>	10.0	1	2.0	2.0	2.0	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	10.0	5	2.6	1.1	4.8	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	14	2.1	0.0	4.8	2	1.8	1.8	1.9	6	0.5	0.1	1.0
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	6	0.3	0.0	0.4	1	0.7	0.7	0.7	6	0.4	0.0	0.9
	<b>U.S. No. 2</b>	2.0	2	1.7	1.1	1.7	1	1.2	1.2	1.2	--	--	--	--
	<b>U.S. No. 3</b>	3.0	1	2.0	2.0	2.0	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	10.0	5	2.6	1.1	4.8	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	14	2.0	0.0	4.8	2	0.9	0.7	1.2	6	0.4	0.0	0.9
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	6	13.4	13.1	13.9	1	13.4	13.4	13.4	6	12.8	12.4	15.0
	<b>U.S. No. 2</b>	N/A	2	13.2	13.2	13.8	1	12.8	12.8	12.8	--	--	--	--
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	N/A	3	13.1	13.0	13.5	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	11	13.2	13.0	13.9	2	13.1	12.8	13.4	6	12.8	12.4	15.0
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	6	12.9	12.6	13.3	1	13.0	13.0	13.0	6	12.4	12.0	14.7
	<b>U.S. No. 2</b>	N/A	2	13.0	13.0	13.1	1	12.5	12.5	12.5	--	--	--	--
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	N/A	3	13.0	12.8	13.3	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	11	13.0	12.6	13.3	2	12.8	12.5	13.0	6	12.4	12.0	14.7

N/A = Does not apply.

-- = No lots reported in this category.

## Export Corn

### Corn Grades and Grade Requirements

Corn is divided into three classes: Yellow corn, White Corn, and Mixed corn. There are no subclasses of corn. Each class of corn is divided into five U.S. numerical grades and U.S.

Sample grade. Special grades are provided to emphasize the qualities or conditions affecting the value of the corn. These special grades are made a part of the grade designation but do not affect the numerical or Sample grade designation.

### U.S. Standards for Corn

Grade	Minimum test weight per bushel (pounds)	Maximum limits of-		
		Damaged kernels		Broken corn and foreign material (percent)
		Heat-damaged kernels (percent)	Total damaged kernels (percent)	
U.S. No. 1	56.0	0.1	3.0	2.0
U.S. No. 2	54.0	0.2	5.0	3.0
U.S. No. 3	52.0	0.5	7.0	4.0
U.S. No. 4	49.0	1.0	10.0	5.0
U.S. No. 5	46.0	3.0	15.0	7.0
U.S. Sample grade				

U.S. Sample grade is corn that:

- (a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or
- (b) Contains stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 2 or more pieces of glass, 3 or more *Crotalaria* seeds (*Crotalaria* spp.), 2 or more castor beans, 8 or more cockleburs, 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), or animal filth in excess of 0.20 percent in 1,000 grams; or
- (c) Has a musty, sour, or commercially objectionable foreign odor; or
- (d) Is heating or otherwise of distinctly low quality.

## Corn

### Definitions

**Test weight (lb/bu)** is pounds of grain per Winchester bushel (2,150.42 cubic inches) as determined using an approved device. Test weight is determined before the removal of broken corn and foreign material.

**Test weight (kg/hl)** is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

**Moisture** is the water content of grain as determined by an approved moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

**Broken corn** is all matter that passes readily through a 12/64-inch round-hole sieve and over a 6/64-inch round-hole sieve. The percentage of broken corn by itself does not affect the numerical grade.

**Foreign material** is all matter that passes readily through a 6/64-inch round-hole sieve and all matter other than corn that remains on top of the 12/64-inch round-hole sieve. The percentage of foreign material by itself does not affect the numerical grade.

**Broken corn and foreign material** is all matter that passes readily through a 12/64-inch sieve, and all matter other than corn that remains in the sieved sample.

**Damaged kernels (total)** are kernels and pieces of corn kernels that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

**Heat-damaged kernels** are kernels and pieces of corn kernels that are materially discolored by excessive respiration, with dark discoloration extending out of the germ, through the sides, and into the back of the kernel.

**Mixed corn** is corn that does not meet the color requirements for either of the classes Yellow corn or White corn, and which includes White-capped Yellow corn.

**Oil, protein, and starch** percentages in corn are determined by an approved near infrared transmittance (NIRT) instrument calibrated to approved methods. Percent corn oil, protein, or starch is reported on a dry matter basis unless other basis is requested. The level of oil, protein, or starch in a sample does not affect the numerical grade.

**Table 8. U.S. Corn Exports: Number of lots and quantity exported by class and grade, 2005-2007**

Class	Grade	2005		2006		2007	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
<b>Yellow Corn</b>	<b>U.S. No. 1</b>	159	1,097,793	184	1,370,975	173	2,098,207
	<b>U.S. No. 2</b>	999	2,709,322	1,302	30,086,164	1,217	27,761,633
	<b>U.S. No. 3</b>	625	16,005,644	700	19,033,607	655	17,581,003
	<b>U.S. No. 4</b>	8	44,142	1	3,297	8	61,731
	<b>U.S. No. 5</b>	2	18,841	--	--	--	--
	<b>U.S. Sample</b>						
	<b>Grade</b>	1	1,670	--	--	1	713
	<b>Not inspected</b>	--	--	1	63,829	2	88,097
	<b>All lots</b>	1,794	39,877,412	2,188	50,557,872	2,056	47,591,384
<b>White Corn</b>	<b>U.S. No. 1</b>	63	375,117	36	389,395	8	35,721
	<b>U.S. No. 2</b>	37	208,942	47	324,435	49	470,176
	<b>U.S. No. 3</b>	2	14,854	1	2,870	3	9,419
	<b>Not inspected</b>	--	--	--	--	1	7,037
	<b>All lots</b>	102	598,913	84	716,700	61	522,353
<b>All Classes</b>	<b>U.S. No. 1</b>	222	1,472,910	220	1,760,370	181	2,133,928
	<b>U.S. No. 2</b>	1,036	22,918,264	1,349	30,410,599	1,266	28,231,809
	<b>U.S. No. 3</b>	627	16,020,498	701	19,036,477	658	17,590,422
	<b>U.S. No. 4</b>	8	44,142	1	3,297	8	61,731
	<b>U.S. No. 5</b>	2	18,841	--	--	--	--
	<b>U.S. Sample</b>						
	<b>Grade</b>	1	1,670	--	--	1	713
	<b>Not inspected</b>	--	--	1	63,829	3	95,134
	<b>All lots</b>	1,896	40,476,325	2,272	51,274,572	2,117	48,113,737

-- = No lots reported in this category.

Not inspected = These lots were sold without grade designation.

**Table 9. Summary of export Yellow corn quality, 2005-2007**

Factor	Grade	Grade Limit	2005			2006			2007					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	56.0	159	58.8	56.0	61.5	184	58.5	56.0	61.5	173	57.8	56.0	61.4
	<b>U.S. No. 2</b>	54.0	1,150	57.1	54.2	61.3	1,302	57.8	54.8	69.5	1,217	57.6	54.9	61.2
	<b>U.S. No. 3</b>	52.0	625	56.9	52.4	61.1	700	57.7	53.1	60.3	655	57.3	53.2	60.7
	<b>U.S. No. 4</b>	49.0	8	57.3	55.0	60.4	1	51.9	51.9	51.9	8	55.6	51.4	58.3
	<b>U.S. No. 5</b>	46.0	2	56.5	55.7	57.2	--	--	--	--	--	--	--	--
	<b>U.S. Sample</b>													
	<b>Grade</b>	N/A	1	57.0	57.0	57.0	--	--	--	--	1	58.4	58.4	58.4
	<b>All lots</b>	N/A	1,794	57.1	52.4	61.5	2,187	57.8	51.9	69.5	2,054	57.5	51.4	61.4
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	159	75.6	72.1	79.1	184	75.3	72.1	79.2	173	74.5	72.0	79.0
	<b>U.S. No. 2</b>	N/A	999	73.6	69.6	78.0	1,302	74.4	70.5	89.5	1,217	74.1	70.6	78.8
	<b>U.S. No. 3</b>	N/A	625	73.3	67.5	78.7	700	74.3	68.3	77.7	655	73.8	68.4	78.1
	<b>U.S. No. 4</b>	N/A	8	73.8	70.9	77.8	1	66.9	66.9	66.9	8	71.6	66.1	75.0
	<b>U.S. No. 5</b>	N/A	2	72.8	71.7	73.6	--	--	--	--	--	--	--	--
	<b>U.S. Sample</b>													
	<b>Grade</b>	N/A	1	73.3	73.3	73.3	--	--	--	--	1	75.2	75.2	75.2
	<b>All lots</b>	N/A	1,794	73.5	67.5	79.1	2,187	74.4	66.9	89.5	2,054	74.0	66.1	79.0
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	159	14.2	13.2	14.8	184	14.2	13.2	14.8	173	14.1	12.8	14.9
	<b>U.S. No. 2</b>	N/A	997	14.3	12.5	15.3	1,300	14.2	12.6	14.9	1,217	14.2	13.0	15.1
	<b>U.S. No. 3</b>	N/A	624	14.3	13.3	15.9	700	14.3	13.4	14.2	655	14.2	13.0	15.1
	<b>U.S. No. 4</b>	N/A	8	14.2	13.2	14.6	1	13.5	13.5	13.5	8	13.8	13.6	14.6
	<b>U.S. No. 5</b>	N/A	2	14.2	14.1	14.3	--	--	--	--	--	--	--	--
	<b>U.S. Sample</b>													
	<b>Grade</b>	N/A	1	14.8	14.8	14.8	--	--	--	--	1	16.9	16.9	16.9
	<b>All lots</b>	N/A	1,791	14.3	12.5	15.9	2,185	14.2	12.6	14.2	2,054	14.2	12.8	16.9
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.1	159	0.0	0.0	0.0	184	0.0	0.0	0.1	173	0.0	0.0	0.0
	<b>U.S. No. 2</b>	0.2	999	0.0	0.0	0.2	1,302	0.0	0.0	0.1	1,217	0.0	0.0	0.2
	<b>U.S. No. 3</b>	0.5	625	0.0	0.0	0.3	700	0.0	0.0	0.1	655	0.0	0.0	0.3
	<b>U.S. No. 4</b>	1.0	8	0.0	0.0	0.0	1	0.0	0.0	0.0	8	0.0	0.0	0.0
	<b>U.S. No. 5</b>	3.0	2	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	<b>U.S. Sample</b>													
	<b>Grade</b>	N/A	1	0.1	0.1	0.1	--	--	--	--	1	0.0	0.0	0.0
	<b>All lots</b>	N/A	1,794	0.0	0.0	0.3	2,187	0.0	0.0	0.1	2,054	0.0	0.0	0.3
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	3.0	159	1.7	0.2	3.0	184	1.7	0.3	3.0	173	1.9	0.4	3.0
	<b>U.S. No. 2</b>	5.0	999	3.2	0.0	5.0	1,302	3.0	0.0	5.0	1,217	2.6	0.5	4.7
	<b>U.S. No. 3</b>	7.0	625	3.5	0.0	7.0	700	3.0	0.0	7.0	655	2.5	0.2	6.8
	<b>U.S. No. 4</b>	10.0	8	7.1	4.2	9.0	1	4.9	4.9	4.9	8	3.0	1.3	8.3
	<b>U.S. No. 5</b>	15.0	2	9.3	8.8	9.6	--	--	--	--	--	--	--	--
	<b>U.S. Sample</b>													
	<b>Grade</b>	N/A	1	10.3	10.3	10.3	--	--	--	--	1	1.6	1.6	1.6
	<b>All lots</b>	N/A	1,794	3.3	0.0	10.3	2,187	3.0	0.0	7.0	2,054	2.5	0.2	8.3

continued

**Table 9. Summary of export Yellow corn quality, 2005-2007--Continued**

Factor	Grade	Grade Limit	2005			2006			2007			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			No. of	Avg.				No. of	Avg.			
<b>Broken Corn and Foreign Material</b>	<b>U.S. No. 1</b>	2.0	159	1.5	0.7	2.0	184	1.5	0.6	2.0	173	1.6
	<b>U.S. No. 2</b>	3.0	998	2.6	0.7	3.0	1,302	2.5	0.9	3.0	1,217	2.4
	<b>U.S. No. 3</b>	4.0	625	2.9	0.8	4.0	697	3.1	0.8	4.0	655	3.0
	<b>U.S. No. 4</b>	5.0	8	4.0	1.3	4.6	1	2.4	2.4	2.4	8	4.4
	<b>U.S. No. 5</b>	7.0	2	3.4	3.4	3.5	--	--	--	--	--	--
	<b>U.S. Sample Grade</b>	N/A	1	3.2	3.2	3.2	--	--	--	1	1.3	1.3
	<b>All lots</b>	N/A	1,793	2.7	0.7	4.6	2,184	2.7	0.6	4.0	2,054	2.6
	<b>Broken Corn</b>	<b>U.S. No. 1</b>	N/A	--	--	--	4	1.2	1.1	1.4	6	1.2
		<b>U.S. No. 2</b>	N/A	146	1.9	1.1	2.7	144	1.8	1.4	2.4	170
		<b>U.S. No. 3</b>	N/A	61	2.6	1.8	3.4	3	2.4	1.2	2.9	--
<b>Foreign Material</b>	<b>U.S. No. 4</b>	N/A	2	2.9	2.9	2.9	--	--	--	--	--	--
	<b>U.S. No. 5</b>	N/A	--	--	--	--	--	--	--	--	--	--
	<b>U.S. Sample Grade</b>	N/A	--	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	209	2.2	1.1	3.4	151	1.9	1.1	2.9	176	1.7
	<b>U.S. No. 1</b>	N/A	--	--	--	--	4	0.4	0.4	0.4	6	0.4
	<b>U.S. No. 2</b>	N/A	143	0.7	0.4	1.1	148	0.7	0.5	1.0	176	0.7
	<b>U.S. No. 3</b>	N/A	60	0.9	0.6	1.2	3	0.5	0.4	0.6	--	--
<b>U.S. No. 4</b>	<b>U.S. No. 4</b>	N/A	2	1.3	1.3	1.3	--	--	--	--	--	--
	<b>U.S. No. 5</b>	N/A	--	--	--	--	--	--	--	--	--	--
	<b>U.S. Sample Grade</b>	N/A	--	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	205	0.8	0.4	1.3	155	0.7	0.4	1.0	182	0.7
	<b>U.S. No. 6</b>	N/A	--	--	--	--	--	--	--	--	--	--

N/A = Does not apply.

-- = No lots reported in this category.

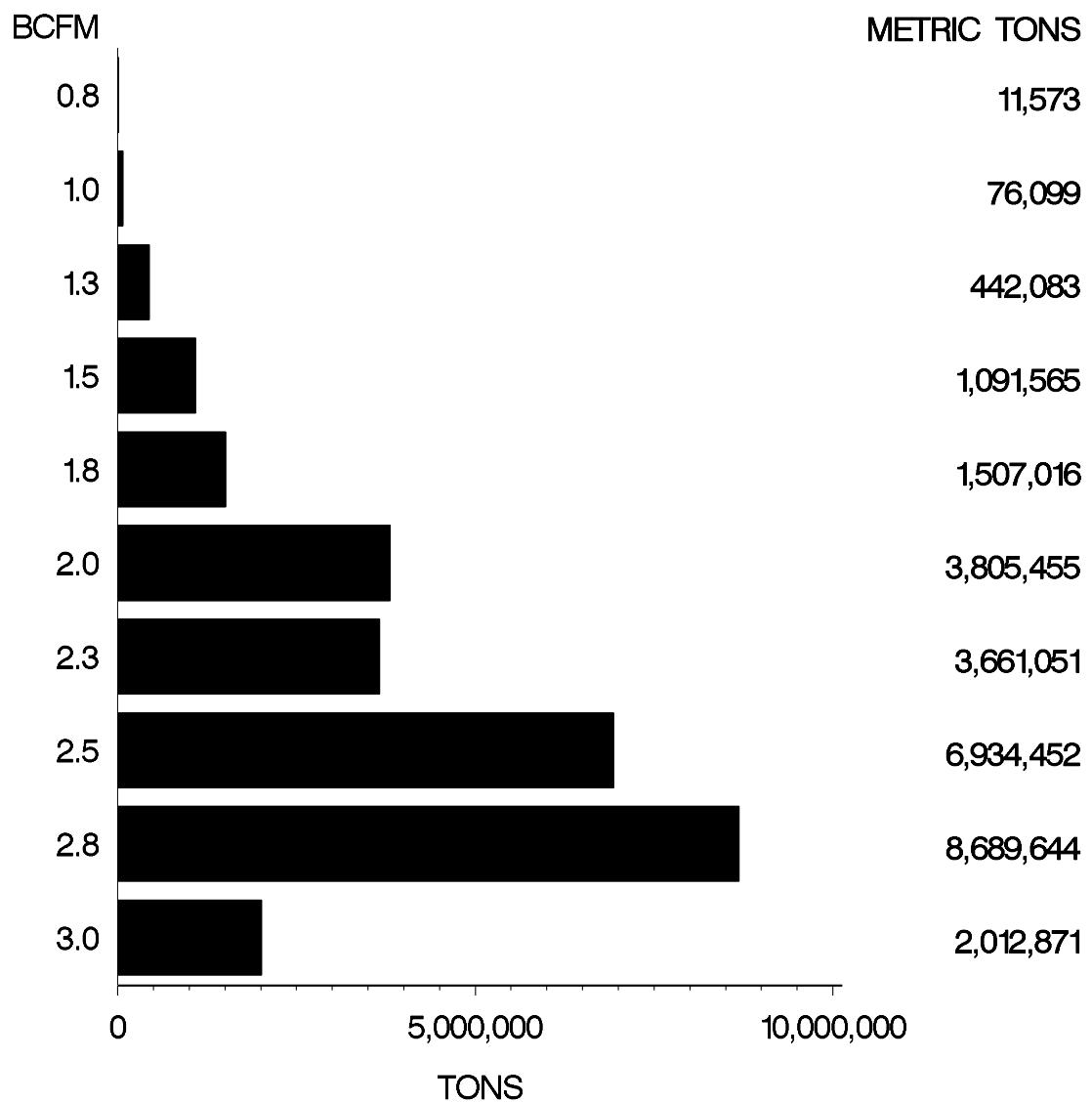
**Table 10. Summary of export White corn quality, 2005-2007**

Factor	Grade	Grade Limit	2005			2006			2007			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	56.0	63	59.8	56.8	61.4	36	59.6	58.2	60.8	8	59.3
	<b>U.S. No. 2</b>	54.0	37	60.0	58.3	61.7	47	59.7	57.5	60.9	49	59.0
	<b>U.S. No. 3</b>	52.0	2	60.1	60.0	60.3	1	59.1	59.1	59.1	3	59.3
	<b>All lots</b>	N/A	102	59.9	56.8	61.7	84	59.6	57.5	60.9	60	59.0
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	63	77.0	73.1	79.0	36	76.7	74.9	78.3	8	76.3
	<b>U.S. No. 2</b>	N/A	37	77.3	75.0	79.4	47	76.9	74.0	78.4	49	75.9
	<b>U.S. No. 3</b>	N/A	2	77.4	77.2	77.7	1	76.1	76.1	76.1	3	76.3
	<b>All lots</b>	N/A	102	77.1	73.1	79.4	84	76.8	74.0	78.4	60	75.9
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	63	14.1	13.4	14.5	36	14.0	13.5	14.5	8	14.4
	<b>U.S. No. 2</b>	N/A	37	14.0	13.6	14.5	47	14.1	11.9	14.6	49	14.1
	<b>U.S. No. 3</b>	N/A	2	13.7	13.5	14.0	1	14.0	14.0	14.0	3	13.8
	<b>All lots</b>	N/A	102	14.0	13.4	14.5	84	14.0	11.9	14.6	60	14.1
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.1	63	0.0	0.0	0.0	36	0.0	0.0	0.0	8	0.0
	<b>U.S. No. 2</b>	0.2	37	0.0	0.0	0.1	47	0.0	0.0	0.1	49	0.0
	<b>U.S. No. 3</b>	0.5	2	0.0	0.0	0.0	1	0.0	0.0	0.0	3	0.0
	<b>All lots</b>	N/A	102	0.0	0.0	0.1	84	0.0	0.0	0.1	60	0.0
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	3.0	63	2.0	0.6	3.0	36	1.7	0.6	3.0	8	1.5
	<b>U.S. No. 2</b>	5.0	37	2.4	0.4	4.9	47	2.4	0.0	4.1	49	3.0
	<b>U.S. No. 3</b>	7.0	2	4.7	3.4	6.4	1	3.0	3.0	3.0	3	1.7
	<b>All lots</b>	N/A	102	2.2	0.4	6.4	84	2.0	0.0	4.1	60	2.9
<b>Broken Corn and Foreign Material</b>	<b>U.S. No. 1</b>	2.0	63	1.6	1.0	2.0	36	1.7	1.0	2.0	8	1.7
	<b>U.S. No. 2</b>	3.0	37	2.0	0.6	2.9	47	2.3	1.0	2.9	49	2.4
	<b>U.S. No. 3</b>	4.0	2	2.9	2.0	3.6	1	3.8	3.8	3.8	3	3.3
	<b>All lots</b>	N/A	102	1.7	0.6	3.6	84	2.0	1.0	3.8	60	2.4
<b>Broken Corn</b>	<b>U.S. No. 1</b>	N/A	17	1.3	0.9	1.6	11	1.3	1.0	1.5	--	--
	<b>U.S. No. 2</b>	N/A	2	2.0	1.9	2.1	8	1.5	1.0	1.9	9	1.8
	<b>All lots</b>	N/A	19	1.4	0.9	2.1	19	1.4	1.0	1.9	9	1.8
<b>Foreign Material</b>	<b>U.S. No. 1</b>	N/A	17	0.5	0.1	0.6	11	0.5	0.3	0.5	--	--
	<b>U.S. No. 2</b>	N/A	2	0.5	0.4	0.7	8	0.5	0.4	0.8	9	0.6
	<b>All lots</b>	N/A	19	0.5	0.1	0.7	19	0.5	0.3	0.8	9	0.6

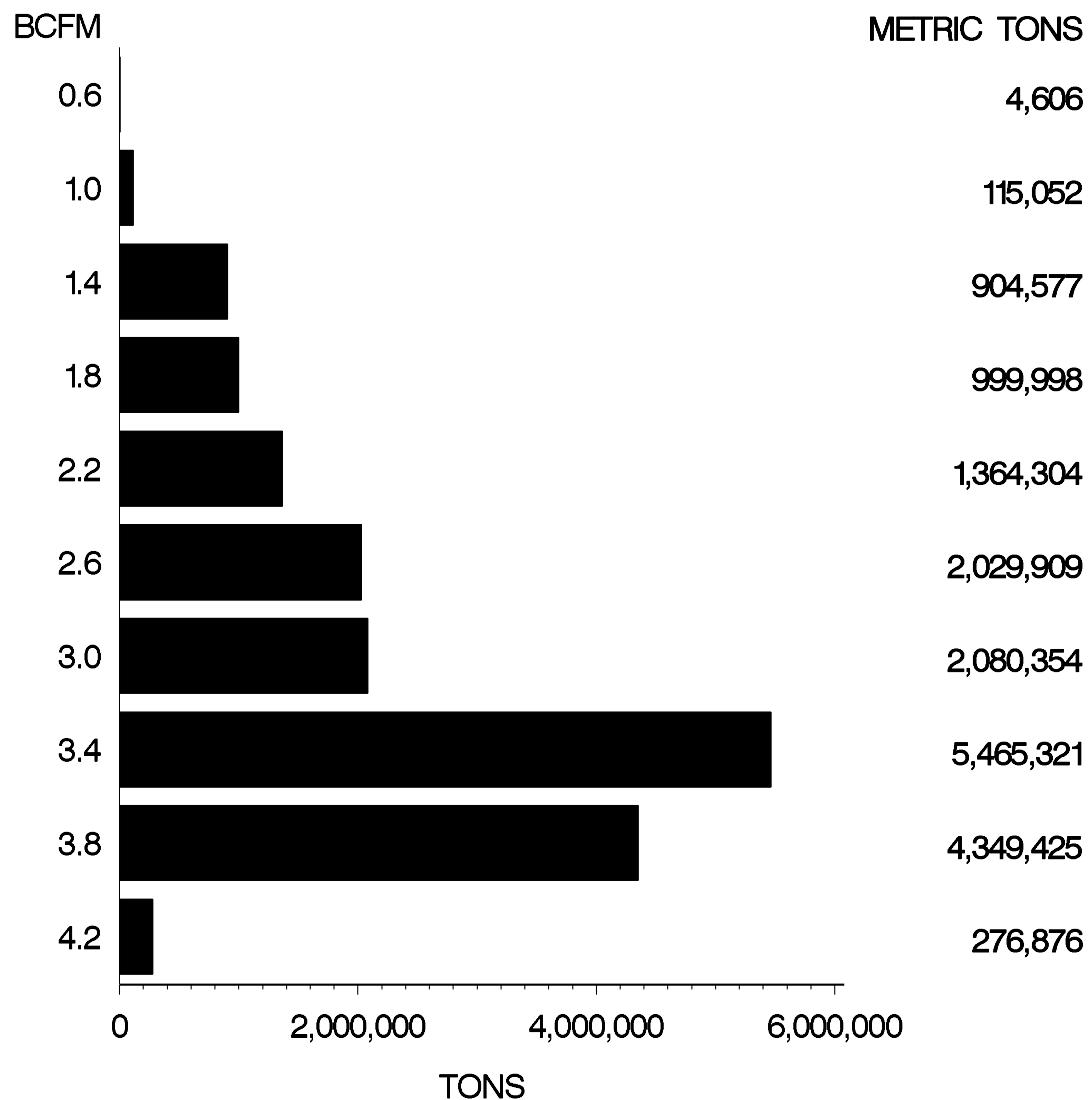
N/A = Does not apply.

-- = No lots reported in this category.

**U.S. CORN EXPORTED, 2007**  
**DISTRIBUTION FOR BCFM – GRADE 2**



**U.S. CORN EXPORTED, 2007**  
**DISTRIBUTION FOR BCFM – GRADE 3**



## Export Soybeans

### Soybean Grades and Grade Requirements

There are two classes of soybeans: Yellow soybeans and Mixed soybeans. There are no soybean subclasses. The class Yellow soybeans is the class most commonly exported by the U.S. market. Each class is divided into four U.S. numerical grades and U.S. Sample grade.

Special grades are provided to emphasize special qualities or conditions affecting the value of the soybeans. These special grades are a part of the grade designation but do not affect the numerical or Sample grade designation.

### U.S. Standards for Soybeans

Grade	Maximum limits of-				
	Damaged kernels		Foreign Material (percent)	Splits (percent)	Soybeans of other colors <sup>1</sup> (percent)
	Heat-damaged kernels (percent)	Total damaged kernels (percent)			
U.S. No. 1	0.2	2.0	1.0	10.0	1.0
U.S. No. 2	0.5	3.0	2.0	20.0	2.0
U.S. No. 3	1.0	5.0	3.0	30.0	5.0
U.S. No. 4	3.0	8.0	5.0	40.0	10.0
U.S. Sample grade					

U.S. Sample grade shall be soybeans which:

- (a) Do not meet the requirements for U.S. Nos. 1, 2, 3, or 4; or
- (b) Contain 4 or more stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 1 or more pieces of broken glass, 3 or more crotalaria seeds, 2 or more castor beans, 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic foreign substance(s), 10 or more rodent pellets, bird droppings, or an equivalent quantity of other animal filth, 11 or more pieces, in any combination, of animal filth, castor beans, crotalaria seeds, glass, stones, or unknown foreign substance. The weight of stones is not applicable for total other material; or
- (c) Have a musty, sour, or commercially objectionable foreign odor (except garlic odor); or
- (d) Are heating or otherwise of distinctly low quality.

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<sup>1</sup> Does not apply to Mixed soybeans.

## Soybeans

### Definitions

**Test weight (lb/bu)** is pounds of grain per Winchester bushel determined by an approved device and is recorded to the nearest tenth pound for soybeans.

**Test weight (kg/hl)** is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

**Moisture** is the water content of grain as determined by an approved electronic moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

**Splits** are soybeans with more than one-fourth of the bean removed and which are not damaged.

**Damaged kernels** are soybeans and pieces of soybeans which are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, heat-damaged, insect-bored, mold-damaged, sprout damaged, stinkbug-stung, or otherwise materially damaged.

**Heat-damaged kernels** are soybeans and pieces of soybeans which are materially discolored and damaged by heat.

**Foreign material** is all matter, including soybeans and pieces of soybeans, that will pass readily through an 8/64-inch sieve and all matter other than soybeans remaining on the sieve after sieving.

**Soybeans of other colors** are soybeans which have green, black, brown, or bicolored seed coats. Before September 9, 1985, this factor was called "brown, black, and/or bicolored soybeans in yellow or green soybeans."

**Mixed soybeans** is a combination of classes of soybeans which does not meet the minimum requirements of a the class Yellow soybeans.

**Protein and oil** percentages in soybeans are determined by an approved near infrared transmittance (NIRT) instrument calibrated to approved methods. Percent protein and oil is reported on a 13 percent moisture basis unless another basis is requested. The level of protein and oil in a sample does not affect the numerical grade.

**Table 11. U.S. Soybean Exports: Number of lots and quantity exported by class and grade, 2005-2007**

Grade	2005		2006		2007	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
<b>U.S. No. 1</b>	38	422,373	36	376,875	23	163,768
<b>U.S. No. 2</b>	805	21,476,843	914	23,665,853	864	22,649,820
<b>U.S. No. 3</b>	43	1,190,869	14	302,690	16	284,457
<b>U.S. No. 4</b>	2	22,689	3	77,822	15	604,182
<b>U.S. Sample Grade</b>	4	61,355	4	33,266	17	501,415
<b>Not inspected</b>	—	—	2	70,856	1	28,018
<b>All lots</b>	892	23,174,129	973	24,527,362	936	24,231,660

Not inspected = These lots were sold without grade designation.

**Table 12. Summary of export Soybean quality, 2005-2007**

Factor	Grade	Grade Limit	2005			2006			2007					
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots	
			No. of Lots	Avg.				No. of Lots	Avg.				No. of Lots	Avg.
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	56.0	37	56.5	56.0	58.4	36	56.4	56.0	57.7	23	56.4	55.6	57.6
	<b>U.S. No. 2</b>	54.0	805	55.7	54.0	58.5	914	55.8	54.1	58.1	864	55.0	0.0	58.2
	<b>U.S. No. 3</b>	52.0	43	54.8	53.2	57.3	14	55.2	54.6	57.1	16	52.2	0.0	56.7
	<b>U.S. No. 4</b>	49.0	2	53.6	53.5	53.6	3	53.4	53.3	53.9	15	54.7	54.2	55.4
	<b>U.S. Sample Grade</b>	N/A	4	54.0	53.9	54.9	4	53.8	53.0	54.5	17	54.6	53.7	55.3
	<b>All lots</b>	N/A	891	55.7	53.2	58.5	971	55.8	53.0	58.1	935	54.9	0.0	58.2
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	37	72.8	72.1	75.2	36	72.6	72.1	74.2	23	72.6	71.6	74.2
	<b>U.S. No. 2</b>	N/A	805	71.7	69.6	75.3	914	71.8	69.7	74.8	864	70.8	0.0	75.0
	<b>U.S. No. 3</b>	N/A	43	70.5	68.5	73.8	14	71.1	70.3	73.5	16	67.1	0.0	73.0
	<b>U.S. No. 4</b>	N/A	2	69.0	68.8	69.1	3	68.7	68.6	69.4	15	70.4	69.8	71.3
	<b>U.S. Sample Grade</b>	N/A	4	69.5	69.4	70.6	4	69.3	68.2	70.1	17	70.3	69.2	71.2
	<b>All lots</b>	N/A	891	71.7	68.5	75.3	971	71.8	68.2	74.8	935	70.7	0.0	75.0
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	37	11.7	10.8	13.3	34	11.8	10.9	13.0	23	11.7	11.0	13.5
	<b>U.S. No. 2</b>	N/A	804	11.8	10.1	13.5	913	11.7	9.7	13.9	863	11.6	10.0	13.7
	<b>U.S. No. 3</b>	N/A	43	12.2	10.9	12.8	14	11.8	9.4	12.9	16	11.8	10.2	12.7
	<b>U.S. No. 4</b>	N/A	2	11.5	11.4	11.7	3	12.1	11.2	12.6	15	12.1	11.5	13.1
	<b>U.S. Sample Grade</b>	N/A	4	12.0	11.9	12.2	4	12.4	11.4	13.0	17	12.2	11.3	12.9
	<b>All lots</b>	N/A	890	11.8	10.1	13.5	968	11.7	9.4	13.9	934	11.6	10.0	13.7
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	37	0.0	0.0	0.1	36	0.0	0.0	0.1	23	0.0	0.0	0.1
	<b>U.S. No. 2</b>	0.5	805	0.1	0.0	0.5	914	0.2	0.0	0.5	864	0.1	0.0	0.5
	<b>U.S. No. 3</b>	1.0	43	0.5	0.0	1.0	14	0.7	0.0	1.0	16	0.3	0.0	0.5
	<b>U.S. No. 4</b>	3.0	2	0.5	0.2	0.6	3	0.4	0.2	0.7	15	0.5	0.4	0.5
	<b>U.S. Sample Grade</b>	N/A	4	1.2	0.7	4.3	4	0.7	0.3	1.2	17	0.6	0.4	1.0
	<b>All lots</b>	N/A	891	0.1	0.0	4.3	971	0.2	0.0	1.2	935	0.1	0.0	1.0
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	37	0.6	0.0	1.0	36	0.4	0.0	1.3	23	0.5	0.2	1.7
	<b>U.S. No. 2</b>	3.0	805	1.4	0.0	3.0	914	1.3	0.0	3.0	864	1.2	0.1	3.0
	<b>U.S. No. 3</b>	5.0	43	3.1	0.2	5.0	14	2.5	0.2	4.9	16	2.9	0.2	4.9
	<b>U.S. No. 4</b>	8.0	2	6.8	6.7	6.8	3	5.4	4.4	6.8	15	4.4	2.3	6.8
	<b>U.S. Sample Grade</b>	N/A	4	7.9	5.2	15.9	4	6.1	5.0	9.3	17	4.4	2.8	6.7
	<b>All lots</b>	N/A	891	1.5	0.0	15.9	971	1.4	0.0	9.3	935	1.3	0.1	6.8

continued

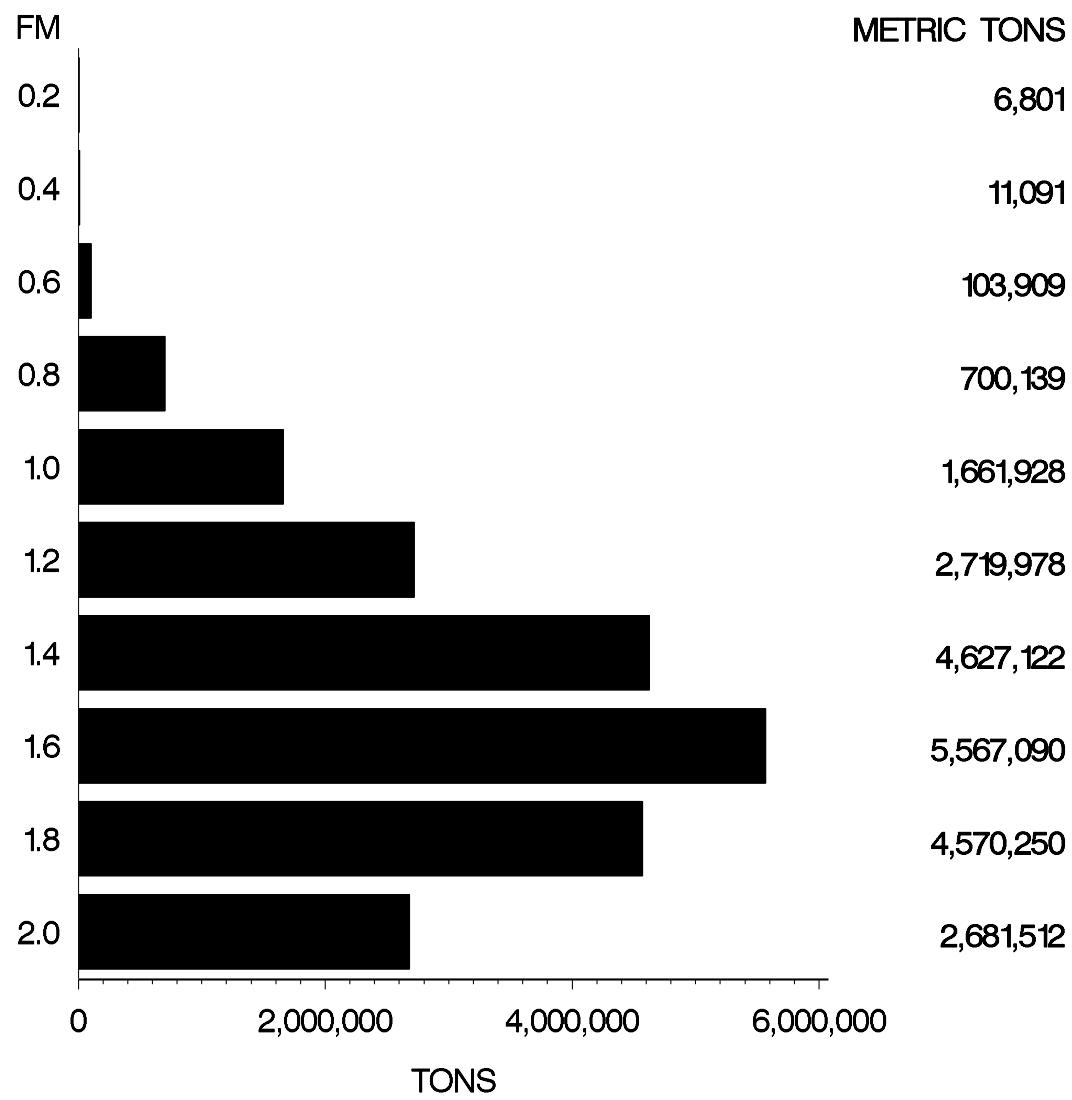
**Table 12. Summary of export Soybean quality, 2005-2007--Continued**

Factor	Grade	Grade Limit	2005				2006				2007				
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots		
			U.S. No. 1	U.S. No. 2				U.S. No. 3	U.S. No. 4				U.S. Sample	Grade	
Splits	Grade	N/A	4	2.0	1.4	2.0	4	1.8	1.6	2.0	17	1.5	1.2	1.9	
	All lots	N/A	891	1.6	0.0	2.7	971	1.5	0.0	2.9	935	1.5	0.1	2.0	
	U.S. No. 1	10.0	37	7.0	0.9	10.0	36	6.1	0.0	9.7	23	7.0	0.5	12.6	
	U.S. No. 2	20.0	805	9.9	0.0	19.1	914	8.3	0.0	19.9	864	9.3	1.6	19.1	
	U.S. No. 3	30.0	43	6.0	3.4	19.0	14	8.7	3.5	28.9	16	10.1	5.3	22.7	
	U.S. No. 4	40.0	2	6.7	5.6	9.6	3	6.9	6.0	8.7	15	7.4	5.1	9.9	
	U.S. Sample	Grade	N/A	4	5.5	3.4	7.0	4	6.7	5.1	9.7	17	7.9	5.3	10.7
	All lots	N/A	891	9.6	0.0	19.1	971	8.3	0.0	28.9	935	9.2	0.5	22.7	
	U.S. No. 1	1.0	37	0.6	0.0	3.0	36	0.8	0.0	3.0	23	0.1	0.0	0.2	
	U.S. No. 2	2.0	805	0.7	0.0	8.0	914	0.5	0.0	7.0	864	0.0	0.0	0.4	
Soybeans of Other Colors	U.S. No. 3	5.0	43	0.2	0.0	7.0	14	0.3	0.0	2.0	16	0.0	0.0	0.1	
	U.S. No. 4	10.0	2	0.0	0.0	0.0	3	0.7	0.0	2.0	15	0.0	0.0	0.2	
	U.S. Sample	Grade	N/A	4	0.0	0.0	0.0	4	0.2	0.0	1.0	17	0.1	0.0	0.1
	All lots	N/A	891	0.7	0.0	8.0	971	0.5	0.0	7.0	935	0.0	0.0	0.4	
	U.S. No. 1	N/A	30	35.3	34.4	38.1	29	35.0	34.2	37.0	17	35.1	34.3	36.7	
	U.S. No. 2	N/A	430	35.1	33.9	39.5	534	34.8	33.4	38.8	514	34.8	32.1	38.9	
	U.S. No. 3	N/A	28	35.1	34.4	35.4	3	35.0	34.9	35.2	1	35.5	35.5	35.5	
	U.S. No. 4	10.0	--	--	--	--	1	35.8	35.8	35.8	14	35.3	34.8	35.6	
	U.S. Sample	Grade	N/A	2	34.9	34.8	35.0	1	34.6	34.6	34.6	13	35.2	34.7	35.5
	All lots	N/A	490	35.1	33.9	39.5	568	34.8	33.4	38.8	559	34.8	32.1	38.9	
Oil (adjusted to 13% moisture)	U.S. No. 1	N/A	28	18.8	16.4	20.2	29	19.2	18.1	20.2	18	18.8	17.4	19.7	
	U.S. No. 2	N/A	431	19.1	16.3	20.9	536	19.4	17.0	20.8	522	19.1	16.9	20.4	
	U.S. No. 3	N/A	30	19.7	18.8	20.9	3	19.6	19.5	19.7	1	19.8	19.8	19.8	
	U.S. No. 4	N/A	--	--	--	--	1	19.7	19.7	19.7	14	19.3	19.1	20.1	
	U.S. Sample	Grade	N/A	2	20.2	20.1	20.2	1	20.4	20.4	20.4	13	19.4	19.0	20.0
	All lots	N/A	491	19.1	16.3	20.9	570	19.4	17.0	20.8	568	19.1	16.9	20.4	

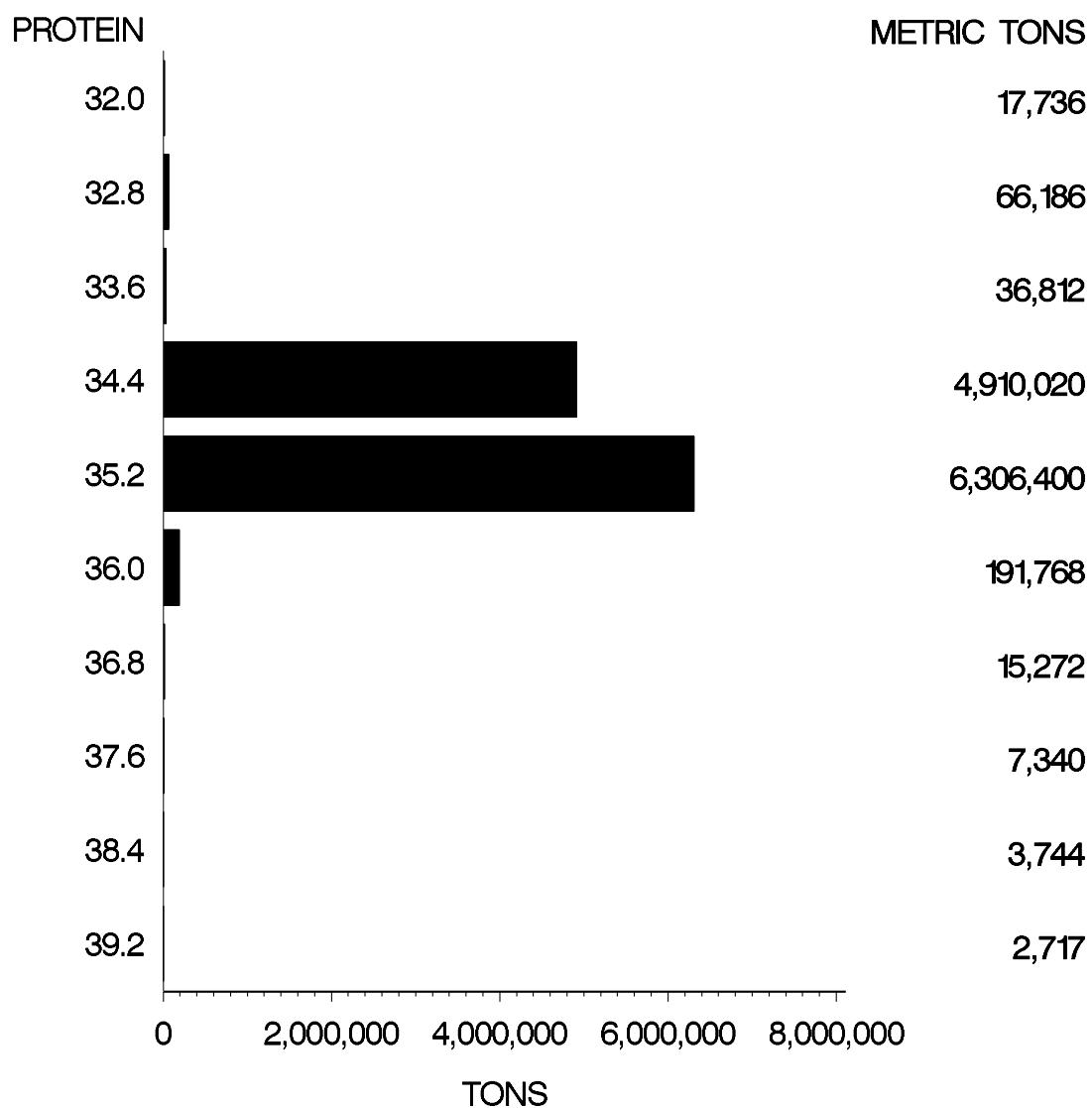
N/A = Does not apply.

-- = No lots reported in this category.

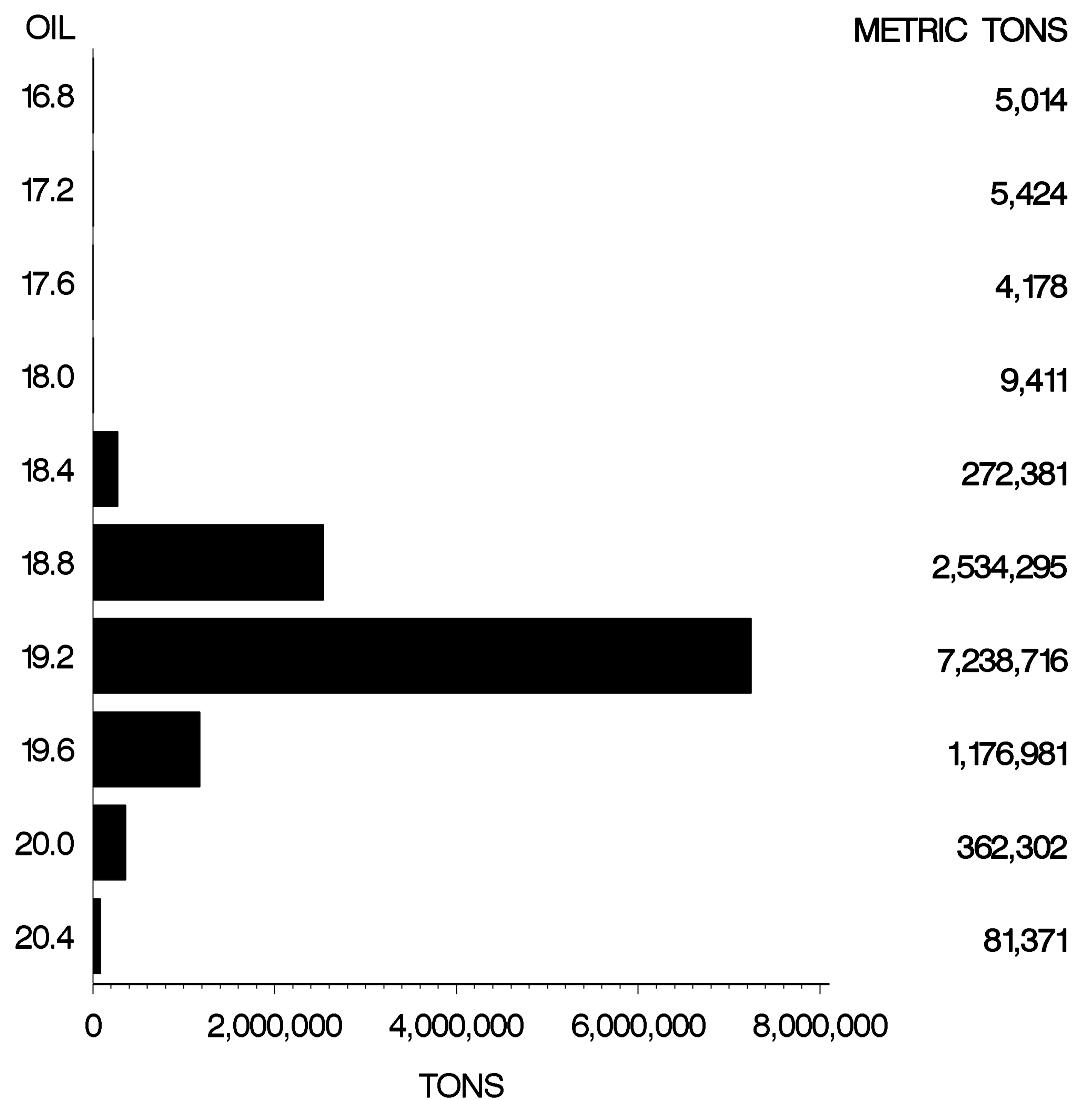
**U.S. SOYBEANS EXPORTED, 2007**  
**DISTRIBUTION FOR FM – GRADE 2**



**U.S. SOYBEANS EXPORTED, 2007**  
**DISTRIBUTION FOR PROTEIN (13% M) – ALL GRADES**



**U.S. SOYBEANS EXPORTED, 2007**  
**DISTRIBUTION FOR OIL (13% M) – ALL GRADES**



## Other Grain Exports

### Sorghum

#### Sorghum Grades and Grade Requirements

Sorghum is divided into four classes: Sorghum, Tannin sorghum, White sorghum, and Mixed sorghum. There are no subclasses in sorghum. Each class is divided into four

numerical grades and U.S. Sample grade. Special grades are provided to emphasize special qualities or conditions affecting the value of sorghum. Special grades are added to and made a part of the grade designation. They do not affect the numerical or Sample grade designation.

#### U.S. Standards for Sorghum

Grade	Minimum test weight per bushel (pounds)	Maximum limits of-			
		Damaged kernels		Broken kernels and foreign material	
		Heat-damaged kernels (percent)	Total damaged kernels (percent)		
U.S. No. 1	57.0	0.2	2.0	4.0	1.5
U.S. No. 2	55.0	0.5	5.0	7.0	2.5
U.S. No. 3 <sup>1</sup>	53.0	1.0	10.0	10.0	3.5
U.S. No. 4	51.0	3.0	15.0	13.0	4.5
U.S. Sample grade					

U.S. Sample grade is sorghum that:

- (a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, or 4; or
- (b) Contains 8 or more stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more *Crotalaria* seeds (*Crotalaria spp.*), 2 or more castor beans (*Ricinus communis L.*), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cockleburs (*Xanthium spp.*) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth; or
- (c) Has a musty, sour, or commercially objectionable foreign odor (except smut odor); or
- (d) Is badly weathered, heating, or of distinctly low quality.

<sup>1</sup> Sorghum which is distinctly discolored shall grade not higher than U.S. No. 3.

## Sorghum

### Definitions

**Test weight (lb/bu)** is pounds of grain per Winchester bushel (2.150.42 cubic inches) as determined using an approved device before the removal of dockage.

**Test weight (kg/hl)** is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

**Heat-damaged kernels** are kernels, pieces of sorghum kernels, and other grains that are materially discolored and damaged by heat.

**Damaged kernels** are kernels, pieces of sorghum kernels, and other grains that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

**Foreign material** is all matter except sorghum, which passes over the number 6 riddle and all matter other than sorghum that remains on the top of the 5/64 triangular-hole sieve.

**Broken kernels** are all matter which passes through a 5/64 triangular-hole sieve and over a 2.5/64 round-hole sieve.

**Broken kernels and foreign material** consists of the combination of broken kernels and foreign material.

**Dockage** is all matter other than sorghum that can be removed from the original sample by use of an approved device. Also, underdeveloped, shriveled, and small pieces of sorghum kernels removed in properly separating the material other than sorghum.

**Moisture** is the water content of grain as determined by an approved moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

**Mixed sorghum** is a sorghum which does not meet the minimum requirements for any of the classes of sorghum, Tannin sorghum or White sorghum.

**Table 13. U.S. Sorghum Exports: Number of lots and quantity exported by class and grade, 2005-2007**

Class	Grade	2005		2006		2007	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
<b>Yellow Sorghum</b>	<b>U.S. No. 1</b>	1	3,264	--	--	--	--
	<b>U.S. No. 2</b>	283	3,118,253	282	3,466,468	207	3,579,584
	<b>U.S. No. 3</b>	2	17,063	--	--	13	474,465
	<b>U.S. No. 4</b>	--	--	--	--	4	141,959
	<b>Not Inspected</b>	--	--	3	29,780	4	263,654
	<b>All lots</b>	286	3,138,580	285	3,496,248	228	4,459,662
<b>All Classes</b>	<b>U.S. No. 1</b>	1	3,264	--	--	--	--
	<b>U.S. No. 2</b>	283	3,118,253	282	3,466,468	207	3,579,584
	<b>U.S. No. 3</b>	2	17,063	--	--	13	474,465
	<b>U.S. No. 4</b>	--	--	--	--	4	141,959
	<b>Not Inspected</b>	--	--	3	29,780	4	263,654
	<b>All lots</b>	286	3,138,580	285	3,496,248	228	4,459,662

-- = No lots reported in this category.

**Table 14. Summary of export Sorghum quality, 2005-2007**

Factor	Grade	Grade Limit	2005			2006			2007					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>		1	59.3	59.3	59.3	—	—	—	—	—	—	—	—
	<b>U.S. No. 2</b>	55.0	283	58.2	55.3	60.4	282	58.4	56.2	60.5	207	58.3	55.3	60.2
	<b>U.S. No. 3</b>	53.0	2	57.6	56.2	58.6	—	—	—	—	13	57.3	55.0	58.3
	<b>U.S. No. 4</b>	—	—	—	—	—	—	—	—	—	4	55.8	55.0	56.9
	<b>All lots</b>	N/A	286	58.2	55.3	60.4	282	58.4	56.2	60.5	224	58.1	55.0	60.2
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>		1	76.4	76.4	76.4	—	—	—	—	—	—	—	—
	<b>U.S. No. 2</b>	N/A	283	74.9	71.2	77.8	282	75.2	72.4	77.9	207	75.1	71.1	77.5
	<b>U.S. No. 3</b>	N/A	2	74.2	72.3	75.4	—	—	—	—	13	73.8	70.8	75.0
	<b>U.S. No. 4</b>	—	—	—	—	—	—	—	—	—	4	71.8	70.9	73.2
	<b>All lots</b>	N/A	286	74.9	71.2	77.8	282	75.2	72.4	77.9	224	74.8	70.8	77.5
<b>Moisture</b>	<b>U.S. No. 1</b>		1	13.7	13.7	13.7	—	—	—	—	—	—	—	—
	<b>U.S. No. 2</b>	N/A	283	13.6	12.6	14.3	282	13.3	12.3	14.0	207	13.4	12.3	14.0
	<b>U.S. No. 3</b>	N/A	2	13.9	13.8	14.0	—	—	—	—	13	13.3	12.8	13.8
	<b>U.S. No. 4</b>	—	—	—	—	—	—	—	—	—	4	13.6	13.3	14.0
	<b>All lots</b>	N/A	286	13.6	12.6	14.3	282	13.3	12.3	14.0	224	13.4	12.3	14.0
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>		1	0.0	0.0	0.0	—	—	—	—	—	—	—	—
	<b>U.S. No. 2</b>	0.5	283	0.0	0.0	0.1	282	0.0	0.0	0.2	207	0.0	0.0	0.1
	<b>U.S. No. 3</b>	1.0	2	0.0	0.0	0.0	—	—	—	—	13	0.0	0.0	0.0
	<b>U.S. No. 4</b>	—	—	—	—	—	—	—	—	—	4	0.0	0.0	0.0
	<b>All lots</b>	N/A	286	0.0	0.0	0.1	282	0.0	0.0	0.2	224	0.0	0.0	0.1
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>		1	0.9	0.9	0.9	—	—	—	—	—	—	—	—
	<b>U.S. No. 2</b>	5.0	283	1.1	0.0	3.3	282	1.2	0.1	4.9	207	1.8	0.3	5.0
	<b>U.S. No. 3</b>	10.0	2	1.7	1.5	1.9	—	—	—	—	13	6.8	1.8	9.1
	<b>U.S. No. 4</b>	—	—	—	—	—	—	—	—	—	4	11.6	10.1	14.3
	<b>All lots</b>	N/A	286	1.1	0.0	3.3	282	1.2	0.1	4.9	224	2.7	0.3	14.3
<b>Broken Kernels and Foreign Material</b>	<b>U.S. No. 1</b>		1	3.4	3.4	3.4	—	—	—	—	—	—	—	—
	<b>U.S. No. 2</b>	7.0	283	3.6	1.5	5.5	282	3.6	1.9	6.1	207	3.5	1.4	5.7
	<b>U.S. No. 3</b>	10.0	2	5.2	4.9	5.6	—	—	—	—	13	3.6	2.9	4.1
	<b>U.S. No. 4</b>	—	—	—	—	—	—	—	—	—	4	3.9	3.4	4.3
	<b>All lots</b>	N/A	286	3.6	1.5	5.6	282	3.6	1.9	6.1	224	3.5	1.4	5.7
<b>Broken Kernels</b>	<b>U.S. No. 1</b>		—	—	—	—	—	—	—	—	—	—	—	—
	<b>U.S. No. 2</b>	N/A	11	2.1	1.7	4.4	1	1.8	1.8	1.8	3	2.4	2.3	2.5
	<b>U.S. No. 3</b>	N/A	—	—	—	—	—	—	—	—	—	—	—	—
	<b>U.S. No. 4</b>	—	—	—	—	—	—	—	—	—	—	—	—	—
	<b>All lots</b>	N/A	11	2.1	1.7	4.4	1	1.8	1.8	1.8	3	2.4	2.3	2.5

N/A = Does not apply.

— = No lots reported in this category.

Continued

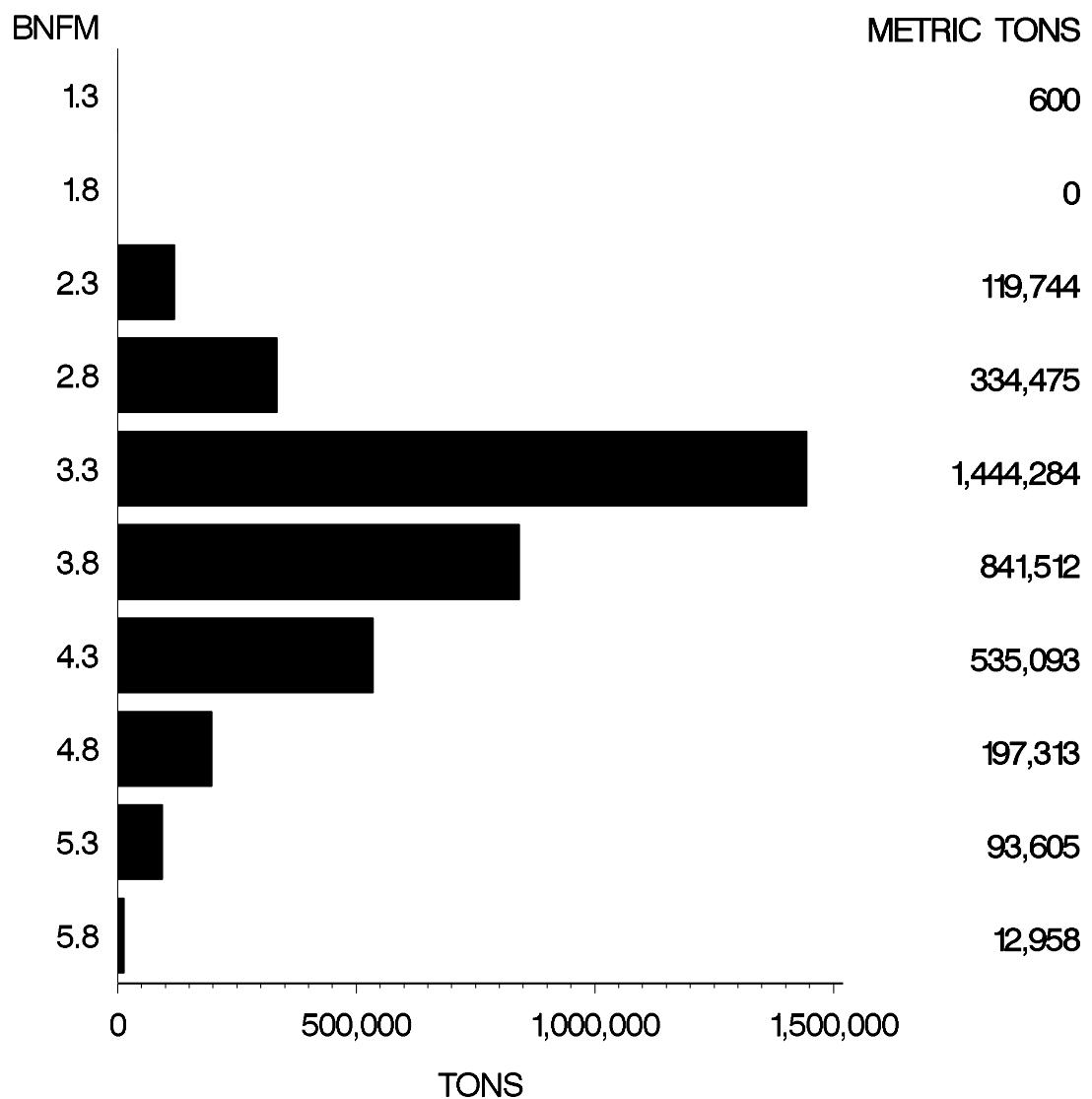
**Table 14. Summary of export Sorghum quality, 2005-2007 -- continued**

Factor	Grade	Grade Limit	2005			2006			2007		
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low
			Avg.	Low				Avg.	High		High
<b>Foreign Material</b>	<b>U.S. No.1</b>		1	1.1	1.1	1.1	—	—	—	—	—
	<b>U.S. No.2</b>	2.5	283	1.0	0.0	2.3	282	1.1	0.0	2.4	207
	<b>U.S. No.3</b>	3.5	2	1.2	0.0	3.0	—	—	—	—	13
	<b>U.S. No.4</b>	—	—	—	—	—	—	—	—	—	4
	<b>All lots</b>	N/A	286	1.0	0.0	3.0	282	1.1	0.0	2.4	224
<b>Dockage</b>	<b>U.S. No.1</b>		1	0.1	0.1	0.1	—	—	—	—	—
	<b>U.S. No.2</b>	N/A	276	0.2	0.1	0.4	278	0.2	0.1	0.4	206
	<b>U.S. No.3</b>	N/A	2	0.3	0.2	0.3	—	—	—	—	13
	<b>U.S. No.4</b>	—	—	—	—	—	—	—	—	—	4
	<b>All lots</b>	N/A	279	0.2	0.1	0.4	278	0.2	0.1	0.4	223

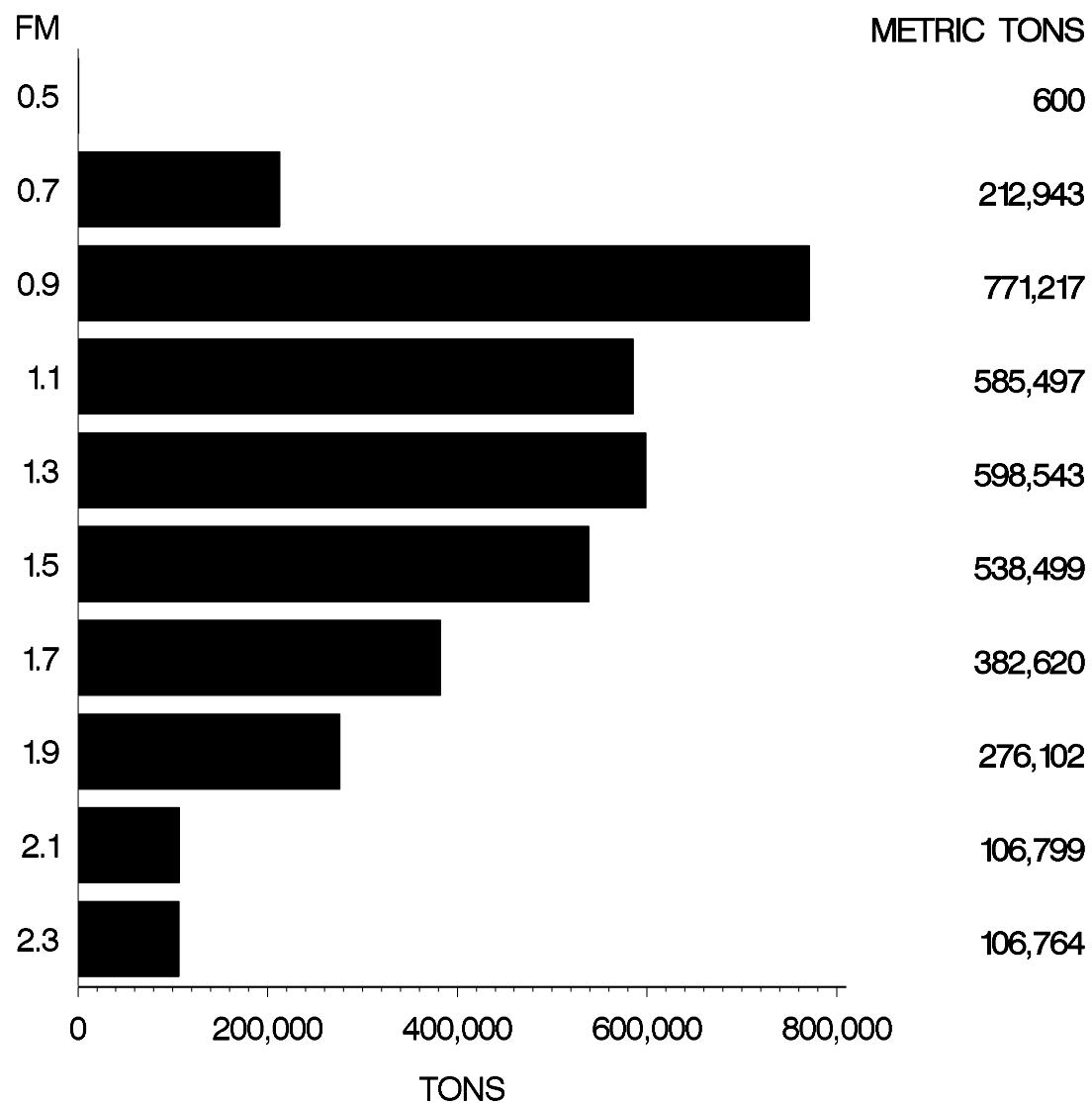
N/A = Does not apply.

-- = No lots reported in this category.

**U.S. SORGHUM EXPORTED, 2007**  
**DISTRIBUTION FOR BNFM – GRADE 2**



**U.S. SORGHUM EXPORTED, 2007**  
**DISTRIBUTION FOR FM – GRADE 2**



## **Barley**

### **Barley Grades and Grade Requirements\***

Barley is divided into two classes: Malting barley and Barley. The class Malting barley is divided into three subclasses: Six-Rowed Malting Barley, Six-Rowed Blue Malting barley, and Two-Rowed Malting barley. The class Barley is divided

into three subclasses: Six Rowed barley, Two-Rowed barley, and Barley. The applicant for service may request either the malting standards or barley standards for malting types.

\* The United States Standards for Barley were revised effective June 1, 1997. The former standards appear in the *1996 U.S. Grain Exports: Quality Report*.

### **Grades and grade requirements for Six-rowed Malting barley and Six-rowed Blue Malting barley**

Grade	Minimum limits of-			Maximum limits of-				
	Test weight per bushel (pounds)	Suitable malting type (percent)	Sound barley <sup>1</sup> (percent)	Damaged kernels <sup>1</sup> (percent)	Foreign Material (percent)	Other grains (percent)	Skinned and broken kernels (percent)	Thin barley <sup>2</sup> (percent)
U.S. No. 1	47.0	95.0	97.0	2.0	0.5	2.0	4.0	7.0
U.S. No. 2	45.0	95.0	94.0	3.0	1.0	3.0	6.0	10.0
U.S. No. 3	43.0	95.0	90.0	4.0	2.0	5.0	8.0	15.0
U.S. No. 4	43.0	95.0	87.0	5.0	3.0	5.0	10.0	15.0

1 Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels or considered against sound barley.

2 Using a 5.5/64 x 3/4 slotted-hole sieve.

NOTE: Malting barley shall not be infested, blighted, ergoty, garlicky, smutty, or contain any special grades. Upon request, malting barley varieties may be inspected and graded in accordance with standards established for the class Barley.

Six-rowed Malting and Six-rowed Blue Malting barley that does not meet the requirements for U.S. Nos. 1, 2, 3, or 4 Malting shall be graded under the Barley standards.

## Grades and grade requirements for Two-rowed Malting barley

Grade	Minimum limits of-			Maximum limits of-			
	Test weight per bushel (pounds)	Suitable malting type (percent)	Sound barley <sup>1</sup> (percent)	Wild Oats (percent)	Foreign Material (percent)	Skinned and broken kernels (percent)	Thin barley <sup>2</sup> (percent)
U.S. No. 1	50.0	97.0	98.0	1.0	0.5	5.0	5.0
U.S. No. 2	48.0	97.0	98.0	1.0	1.0	7.0	7.0
U.S. No. 3	48.0	95.0	96.0	2.0	2.0	10.0	10.0
U.S. No. 4	48.0	95.0	93.0	3.0	3.0	10.0	10.0

1 Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels or considered against sound barley.

2 Using a 5.5/64 x 3/4 slotted-hole sieve.

NOTE: Malting barley shall not be infested, blighted, ergoty, garlicky, smutty, or contain any special grades. Upon request, malting barley varieties may be inspected and graded in accordance with standards established for the class Barley.

Two-rowed barley that does not meet the requirements for U.S. Nos. 1, 2, 3, or 4 Malting shall be graded under the Barley standards.

## Grades and grade requirements for Barley

Grade	Minimum limits of-		Maximum limits of-				
	Test weight per bushel (pounds)	Sound barley (percent)	Damaged kernels <sup>1</sup> (percent)	Heat-damaged kernels (percent)	Foreign Material (percent)	Broken kernels (percent)	Thin barley <sup>2</sup> (percent)
U.S. No. 1	47.0	97.0	2.0	0.2	1.0	4.0	10.0
U.S. No. 2	45.0	94.0	4.0	0.3	2.0	8.0	15.0
U.S. No. 3	43.0	90.0	6.0	0.5	3.0	12.0	25.0
U.S. No. 4	40.0	85.0	8.0	1.0	4.0	18.0	35.0
U.S. No. 5	36.0	75.0	10.0	3.0	5.0	28.0	75.0
U.S. Sample Grade							

U.S. Sample grade shall be barley that:

- (a) Does not meet the requirements for the grades U.S. No. 1, 2, 3, 4, or 5; or
- (b) Contains 8 or more stones or any number of stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria spp.*), 2 or more castor beans (*Ricinus communis L.*), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cocklebur (*Xanthium spp.*) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth per 1-1/8 to 1-1/4 quarts of barley; or
- (c) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
- (d) Is heating or otherwise of distinctly low quality.

1 Includes heat-damaged kernels. Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels.

2 Using a 5/64 x 3/4 slotted-hole sieve.

## Barley

### Definitions

**Test weight (lb/bu)** is pounds of grain per Winchester bushel as determined using an approved device on a dockage-free barley sample.

**Test weight (kg/hl)** is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated by multiplying pounds per bushel by 1.287.

**Heat-damaged kernels** are kernels and pieces of barley kernels, other grains, and wild oats that are materially discolored and damaged by heat.

**Damaged kernels** are kernels, pieces of barley kernels, other grains, and wild oats that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, injured-by-heat, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

**Foreign material** is all matter other than barley, other grains, and wild oats that remains in the sample after removal of dockage.

**Skinned and broken kernels** are barley kernels that have one-third or more of the hull removed, or that the hull is loose or missing over the germ, or broken kernels, or whole kernels that have a part or all of the germ missing.

**Dockage** is all matter other than barley that can be removed from the original sample by use of an approved device. Also, underdeveloped, shriveled, and small pieces of barley kernels removed by properly separating the material other than barley and that cannot be recovered by properly rescreening or recleaning.

**Moisture** is the water content of grain as determined by an approved moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

**Suitable malting type** are varieties of malting barley that are recommended by the American Malting Barley Association and any other proprietary malting type(s) used by the malting and brewing industries.

**Sound barley** is kernels and pieces of barley kernels that are not damaged.

**Thin barley** is:

Six-rowed Malting barley that passes through a 5/64 x 3/4 slotted-hole sieve and Two-rowed Malting barley that passes through a 5.5/64 x 3/4 slotted-hole sieve.

Six-rowed barley, Two-rowed barley, or Barley that passes through a 5/64 x 3/4 slotted-hole sieve.

**Table 15. U.S. Barley Exports: Number of lots and quantity exported by class and grade, 2005-2007**

Class	Grade	2005		2006		2007	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
	<b>U.S. No. 1</b>	--	--	--	--	--	--
	<b>U.S. No. 2</b>	32	610,596	18	305,800	36	685,338
	<b>U.S. No. 3</b>	--	--	--	--	--	--
	<b>U.S. No. 4</b>	--	--	--	--	--	--
	<b>All lots</b>	32	610,596	18	305,800	36	685,338

-- = No lots reported in this category.

**Table 16. Summary of export Barley quality, 2005-2007**

Factor	Grade	Grade Limit	2005			2006			2007		
			No. of Lots			No. of Lots			No. of Lots		
			Avg.	Low	High	Avg.	Low	High	Avg.	Low	High
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	47.0	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	45.0	32	50.9	47.5	54.6	18	51.8	47.5	54.3	36
	<b>U.S. No. 3</b>	43.0	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	43.0	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	50.9	47.5	54.6	18	51.8	47.5	54.3	36
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	N/A	32	65.5	61.2	70.3	18	66.7	61.2	69.9	36
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	N/A	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	65.5	61.2	70.3	18	66.7	61.2	69.9	36
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	N/A	32	11.8	9.8	13.2	18	11.0	9.9	13.3	36
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	N/A	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	11.8	9.8	13.2	18	11.0	9.9	13.3	36
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	0.3	32	0.0	0.0	0.0	18	0.0	0.0	0.1	36
	<b>U.S. No. 3</b>	0.5	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	1.0	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	0.0	0.0	0.0	18	0.0	0.0	0.1	36
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	4.0	32	0.7	0.0	1.6	18	0.4	0.0	3.1	36
	<b>U.S. No. 3</b>	6.0	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	8.0	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	0.7	0.0	1.6	18	0.4	0.0	3.1	36
<b>Foreign Material</b>	<b>U.S. No. 1</b>	1.0	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	2.0	32	0.1	0.0	0.2	18	0.1	0.0	0.2	36
	<b>U.S. No. 3</b>	3.0	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	4.0	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	0.1	0.0	0.2	18	0.1	0.0	0.2	36
<b>Sound Barley</b>	<b>U.S. No. 1</b>	97.0	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	94.0	32	98.7	95.8	99.9	18	96.4	0.0	99.9	36
	<b>U.S. No. 3</b>	90.0	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	87.0	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	98.7	95.8	99.9	18	96.4	0.0	99.9	36

-- = No lots reported in this category.

continued

**Table 16. Summary of export Barley quality, 2005-2007 -- Continued**

Factor	Grade	Grade Limit	2005			2006			2007			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			No. of Lots	Avg.				No. of Lots	Avg.			
<b>Thin Barley</b>	<b>U.S. No. 1</b>	10.0	--	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	15.0	32	5.1	0.0	8.8	18	7.0	1.8	12.8	36	5.8
	<b>U.S. No. 3</b>	15.0	--	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	15.0	--	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	5.1	0.0	8.8	18	7.0	1.8	12.8	36	5.8
<b>Broken Kernels</b>	<b>U.S. No. 1</b>	4.0	--	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	8.0	32	0.0	0.0	0.0	18	0.2	0.0	0.9	36	0.5
	<b>U.S. No. 3</b>	12.0	--	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	12.0	--	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	32	0.0	0.0	0.0	18	0.2	0.0	0.9	36	0.5
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 2</b>	N/A	31	1.1	0.4	1.5	18	0.9	0.5	1.7	35	0.8
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	--	--
	<b>U.S. No. 4</b>	N/A	--	--	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	31	1.1	0.4	1.5	18	0.9	0.5	1.7	35	0.8

N/A = Does not apply.

-- = No lots reported in this category.

## **Flaxseed**

### **Flaxseed Grades and Grade Requirements**

There are no classes of flaxseed. Flaxseed is divided into two numerical grades and U.S. Sample grade. Other determinations not specifically provided for under the general provisions are made on the basis of the grain when free from

dockage, except the determination of odor is made on either the basis of the grain as a whole or the grain when free from dockage.

### **U.S. Standards for Flaxseed**

Grade	Minimum test weight per bushel (pounds)	Maximum limits of damaged kernels	
		Heat damaged kernels (percent)	Total (percent)
U.S. No. 1	49.0	0.2	10.0
U.S. No. 2	47.0	0.5	15.0
U.S. Sample Grade			

U.S. Sample grade is flaxseed that:

- (a) Does not meet the requirements for the grades U.S. Nos. 1 or 2; or
- (b) Contains 8 or more stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more *Crotalaria* seeds (*Crotalaria* spp.), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 10 or more rodent pellets, bird dropping, or equivalent quantity of other animal filth per 1-1/8 to 1-1/4 quarts of flaxseed; or
- (c) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor), or
- (d) Is heating or otherwise of distinctly low quality.

## **Flaxseed**

### **Definitions**

**Flaxseed.** Grain that, before the removal of dockage, consists of 50 percent or more of common flaxseed (*Linum usitatissimum L.*) and not more than 20 percent of other grains for which standards have been established under the United States Grain Standards Act and which, after the removal of dockage, contains 50 percent or more of whole flaxseed.

**Damaged kernels.** Kernels and pieces of flaxseed kernels that are badly grounddamaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heatdamaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

**Dockage.** All matter other than flaxseed that can be removed from the original sample by use of an approved device according to procedures prescribed in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of flaxseed kernels removed in properly separating the material other than flaxseed and that cannot be recovered by properly rescreening or recleaning.

**Heat-damaged kernels.** Kernels and pieces of flaxseed kernels that are materially discolored and damaged by heat.

**Other grains.** Barley, corn, cultivated buckwheat, einkorn, emmer, guar, hull-less barley, nongrain sorghum, oats, Polish wheat, popcorn, poulard wheat, rice, rye, safflower, sorghum, soybeans, spelt, sunflower seed, sweet corn, triticale, wheat, and wild oats.

**Table 17. U.S. Flaxseed Exports: Number of lots and quantity exported by class and grade, 2005-2007**

	2005		2006		2007	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
<b>U.S. No. 1</b>	10	81,633	4	24,953	6	51,754
<b>All lots</b>	10	81,633	4	24,953	6	51,754

-- = No lots reported in this category.

**Table 18. Summary of export Flaxseed quality, 2005-2007**

Factor	Grade	Grade Limit	2004				2005				2006						
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			U.S. No. 1	All lots				U.S. No. 1	All lots				U.S. No. 1	All lots			
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	49.0	10	50.6	49.5	50.9	4	50.5	50.3	50.6	6	50.4	50.1	50.7			
	<b>All lots</b>	N/A	10	50.6	49.5	50.9	4	50.5	50.3	50.6	6	50.4	50.1	50.7			
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	10	65.2	63.7	65.5	4	65.0	64.8	65.1	6	64.8	64.5	65.2			
	<b>All lots</b>	N/A	10	65.2	63.7	65.5	4	65.0	64.8	65.1	6	64.8	64.5	65.2			
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	10	7.5	6.9	8.0	4	7.3	6.9	7.6	6	7.0	6.9	7.4			
	<b>All lots</b>	N/A	10	7.5	6.9	8.0	4	7.3	6.9	7.6	6	7.0	6.9	7.4			
<b>Heat-damaged kernels</b>	<b>U.S. No. 1</b>	0.2	10	0.0	0.0	0.1	4	0.0	0.0	0.0	6	0.0	0.0	0.0			
	<b>All lots</b>	N/A	10	0.0	0.0	0.1	4	0.0	0.0	0.0	6	0.0	0.0	0.0			
<b>Damaged Flaxseed (Total)</b>	<b>U.S. No. 1</b>	10.0	10	0.0	0.0	0.2	4	0.1	0.0	0.2	6	0.0	0.0	0.2			
	<b>All lots</b>	N/A	10	0.0	0.0	0.2	4	0.1	0.0	0.2	6	0.0	0.0	0.2			
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	10	5.0	4.0	6.5	4	6.0	5.4	6.9	6	5.6	4.5	6.4			
	<b>All lots</b>	N/A	10	5.0	4.0	6.5	4	6.0	5.4	6.9	6	5.6	4.5	6.4			

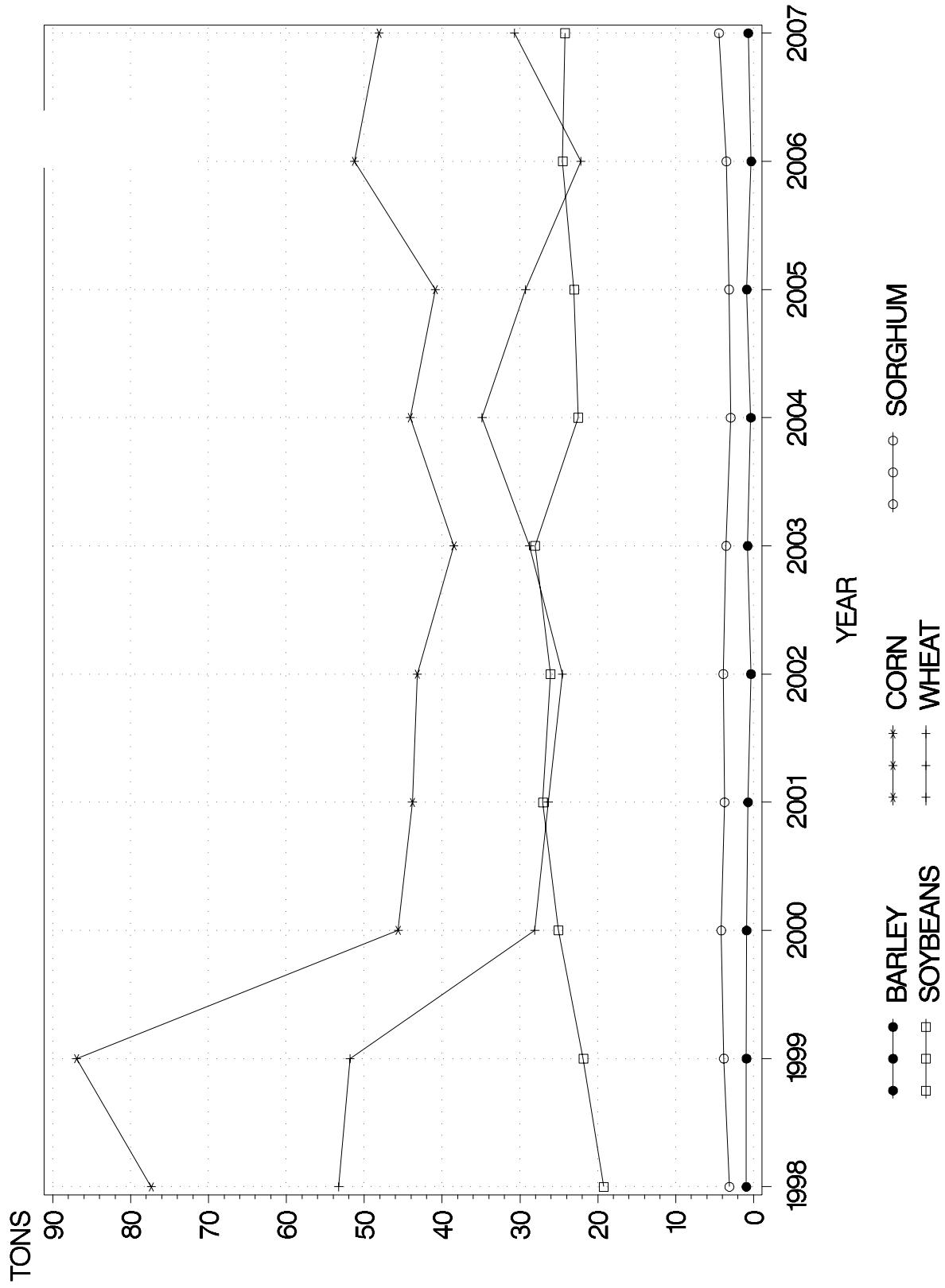
N/A = Does not apply.

-- = No lots reported in this category.

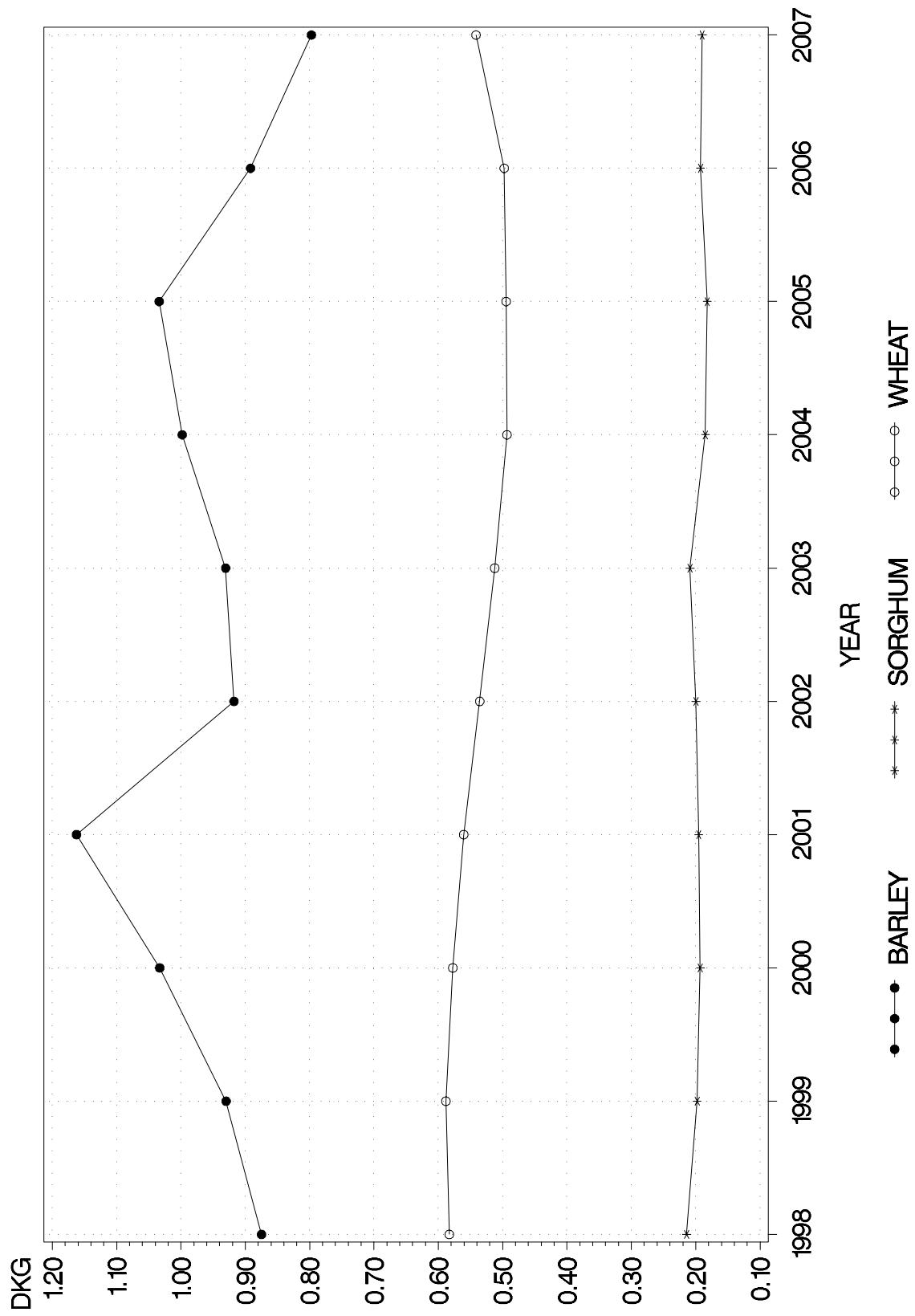
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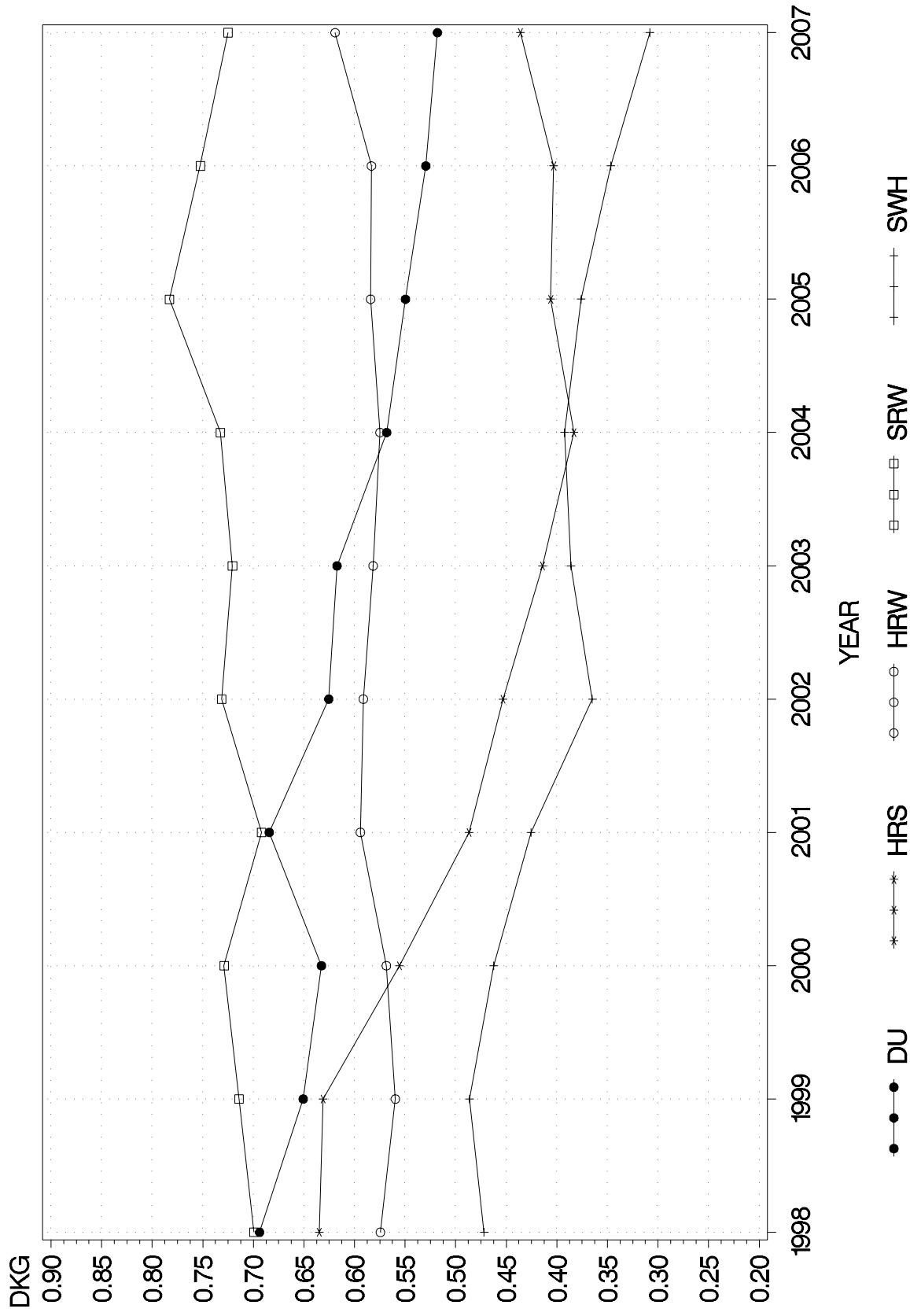
**U.S. GRAIN QUANTITY EXPORTED,  
1998–2007**  
METRIC TONS IN MILLIONS



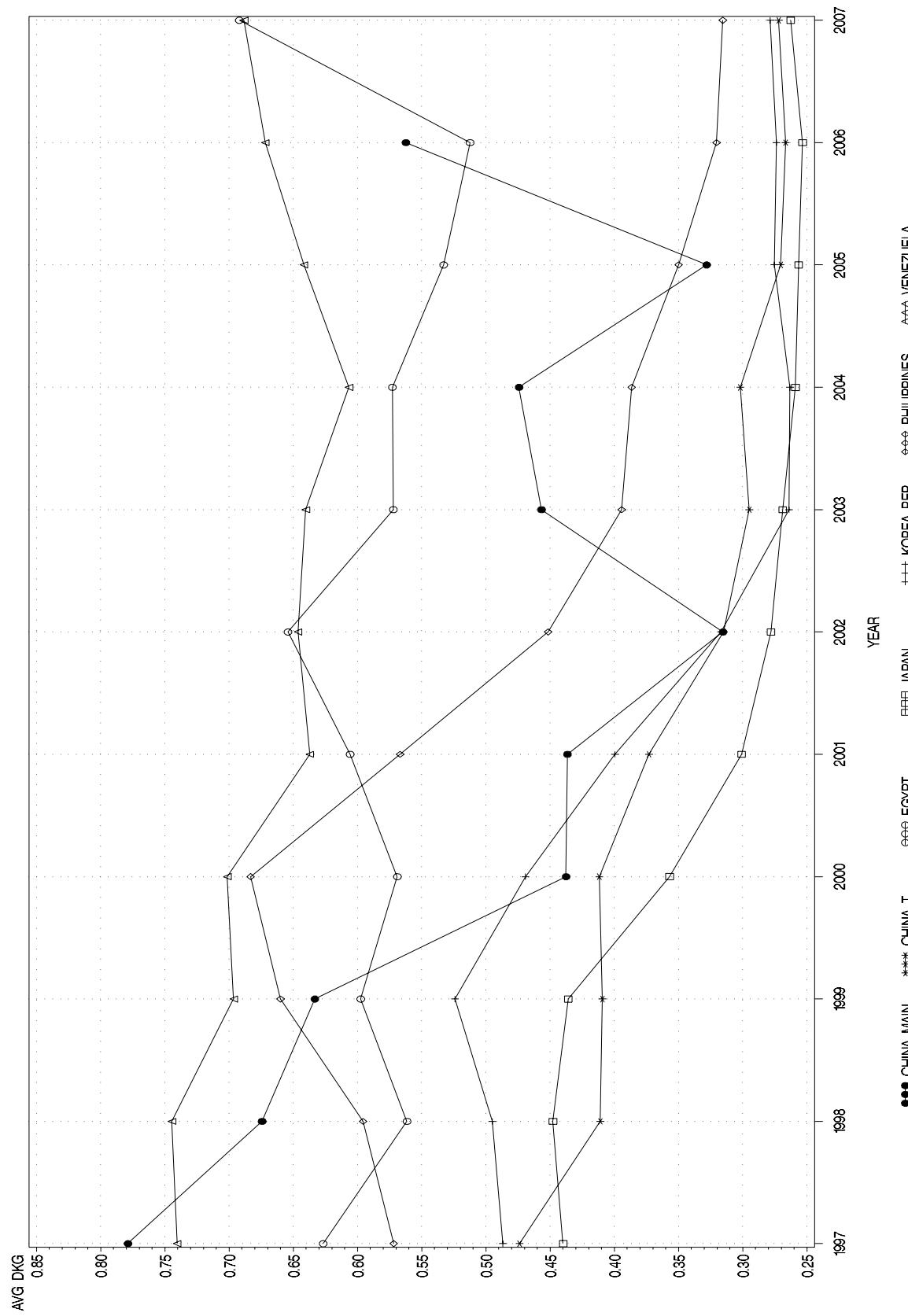
**U.S. GRAIN EXPORTED, 1998–2007**  
AVG DOCKAGE BY GRAIN



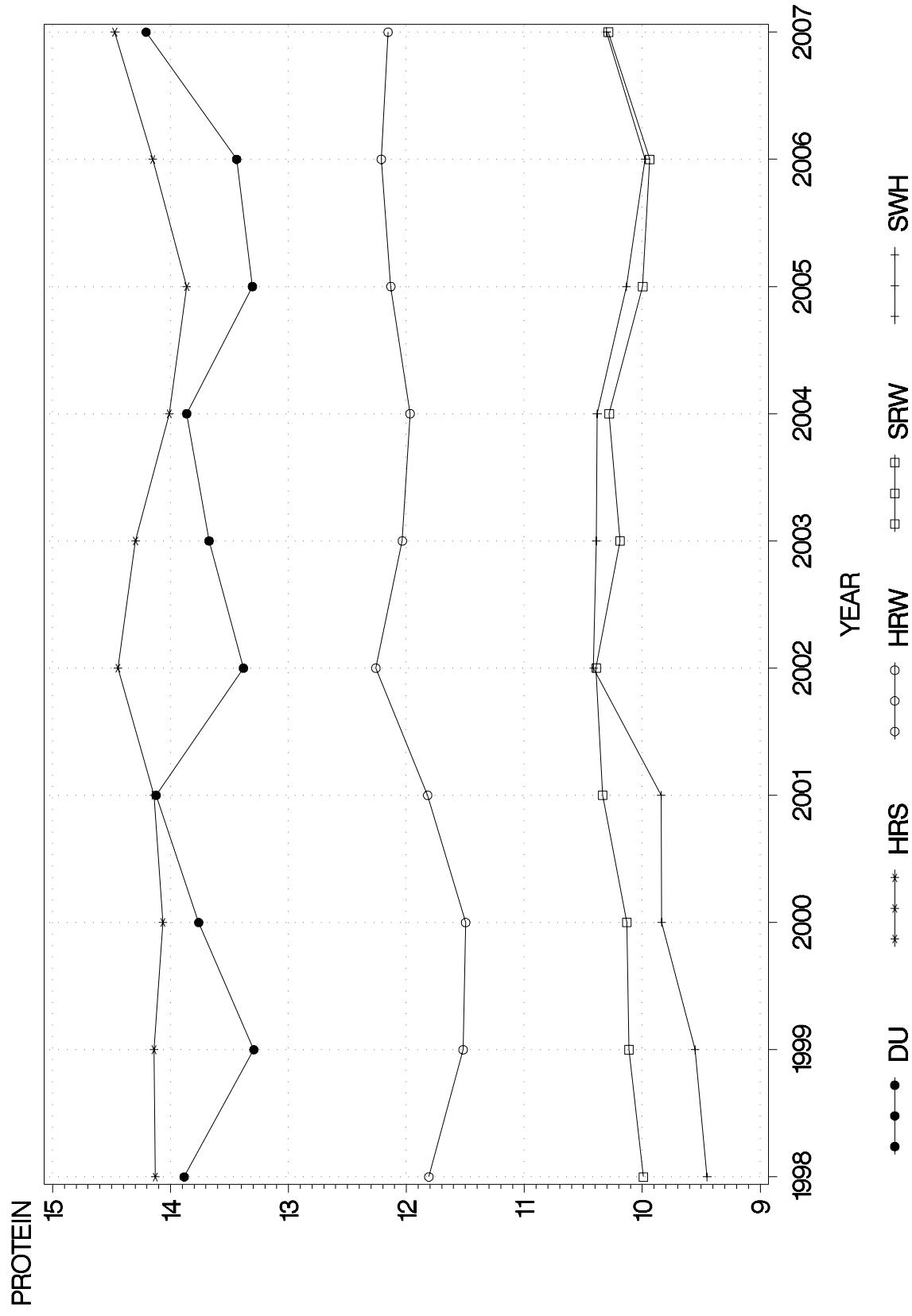
**U.S. WHEAT EXPORTED, 1998–2007**  
AVG DOCKAGE BY CLASS



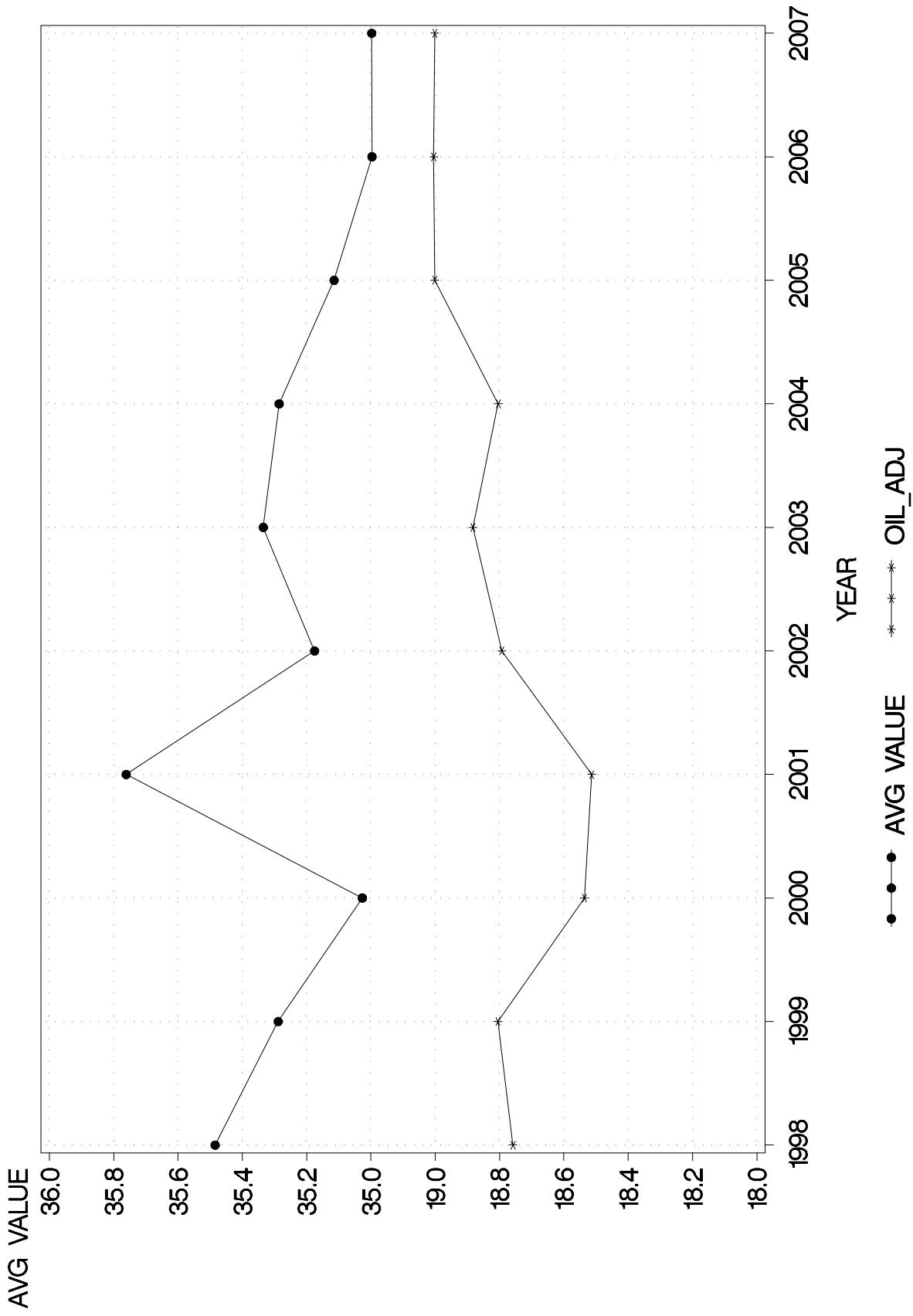
**U.S. WHEAT EXPORTED, 1997–2007**  
 AVG DOCKAGE BY DESTINATION COUNTRY



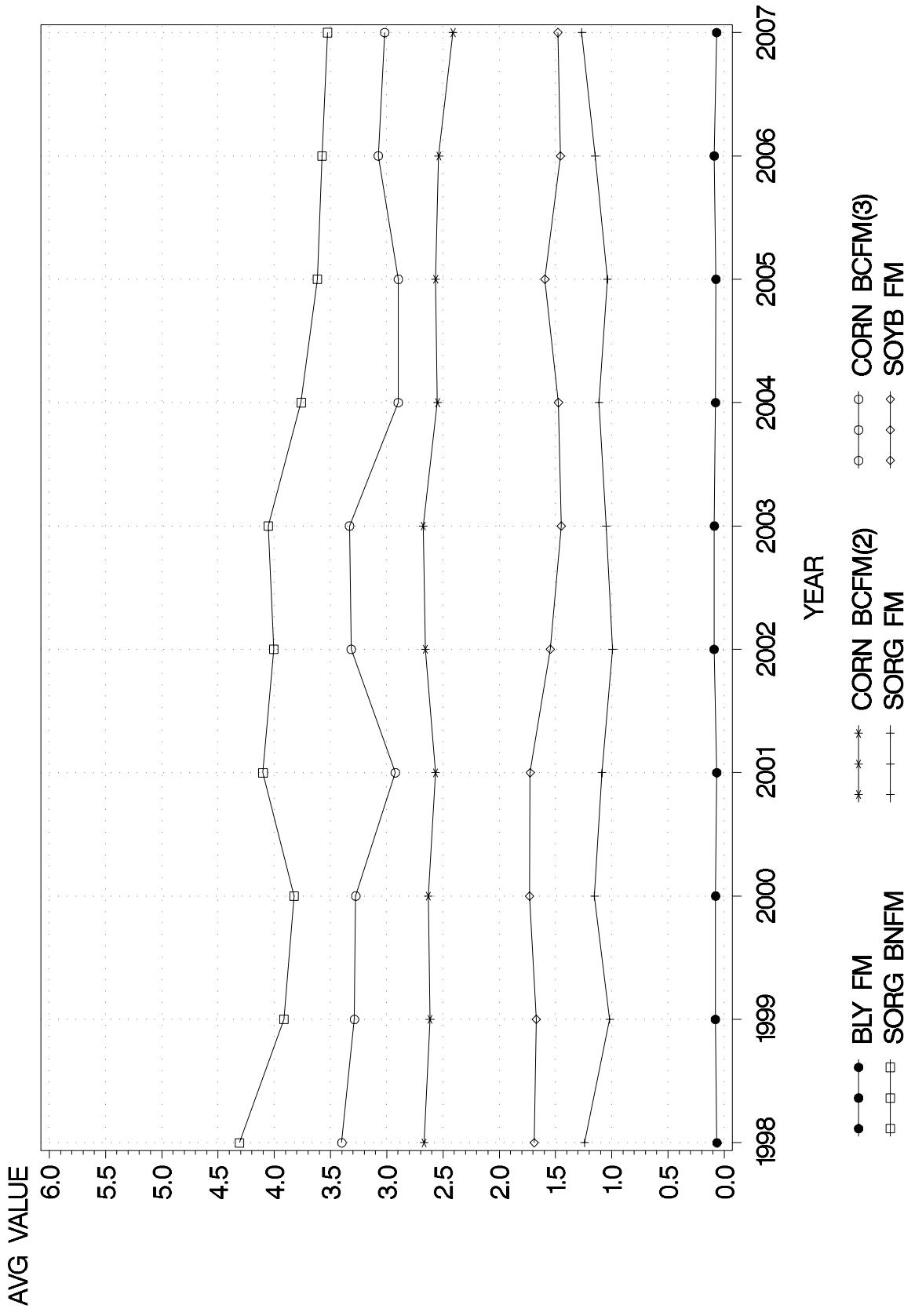
**U.S. WHEAT EXPORTED, 1998—2007**  
**Avg Protein(12% M) By Class**



**U.S. SOYBEANS EXPORTED, 1998–2007**  
AVG PROTEIN AND OIL (13% M)



**U.S. GRAINS EXPORTED, 1998–2007**  
 AVG FM BNFM BCFM



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