

Introduction

The *2002 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 2002 report is the nineteenth edition of this annual summary of export grain quality. The report summarizes the quality of export wheat, corn, soybeans, sorghum, barley, sunflower seeds, canola, and flaxseed. Mixed grain and rye 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 94.1 percent of the total export lots in the EGIS database for 2002.

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.¹

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.

Conversion Equation

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

Legal Test Weight Per Bushel
for Specific Grains

Wheat =	60 pounds/bushel
Corn =	56 pounds/bushel
Soybeans =	60 pounds/bushel
Canola =	50 pounds/bushel
Sorghum =	56 pounds/bushel
Barley =	48 pounds/bushel
Sunflower Seed =	28 pounds/bushel
Rye =	56 pounds/bushel
Oats =	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 ³ (total)	Wheat of other classes ⁴	
	Hard Red Spring wheat or White Club wheat ¹ (pounds)	All other classes and subclasses (pounds)	Heat-damaged kernels (percent)	Total ² (percent)				Contrasting classes (percent)	Total ⁵ (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.

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

² Includes heat-damaged kernels.

³Defects 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.

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

⁵Includes 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, Hard White, 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, 2000-2002

Class	Grade	2000		2001		2002	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Hard Red Winter Wheat	U.S. No. 1	91	601,096	79	528,603	83	523,847
	U.S. No. 2	666	10,239,609	554	8,512,510	609	8,534,472
	U.S. No. 3	1	7,965	--	--	--	--
	All lots	758	10,848,670	633	9,041,113	692	9,058,319
Hard Red Spring Wheat	U.S. No. 1	144	1,421,911	125	1,250,842	125	1,297,835
	U.S. No. 2	484	4,494,001	496	4,928,681	494	5,456,054
	U.S. No. 3	--	--	--	--	--	--
	U.S. No. 4	--	--	--	--	1	2,123
	All lots	628	5,915,912	621	6,179,523	620	6,756,012
Soft Red Winter Wheat	U.S. No. 1	--	--	5	50,533	1	2,752
	U.S. No. 2	368	4,786,099	373	4,920,037	315	3,455,327
	U.S. No. 3	9	59,360	4	12,065	1	1,604
	U.S. No. 4	1	1,041	--	--	--	--
	U.S. No. 5	1	58,006	--	--	--	--
	U.S. Sample						
	Grade	3	63,879	--	--	--	--
	All lots	382	4,968,385	384	5,012,518	317	3,459,683
Durum Wheat	U.S. No. 1	29	238,642	22	207,388	38	308,875
	U.S. No. 2	56	592,910	39	211,915	50	407,643
	U.S. No. 3	9	132,109	13	226,073	2	28,906
	U.S. No. 4	7	100,850	1	17,309	1	2,750
	U.S. No. 5	2	12,174	28	402,705	4	69,676
	U.S. Sample						
	Grade	4	77,017	17	134,141	3	37,027
	All lots	107	1,153,702	120	1,199,531	98	854,877
Soft White Wheat	U.S. No. 1	139	707,807	159	719,285	174	755,423
	U.S. No. 2	240	4,4394,053	249	4,131,529	207	3,164,114
	All lots	379	5,101,860	408	4,850,814	381	3,919,537
Hard White Wheat	U.S. No. 2	--	--	4	18,846	5	12,505
	All lots	--	--	4	18,846	5	12,505
Mixed Wheat	U.S. No. 2	--	--	--	--	2	12,205
	All lots	--	--	--	--	2	12,205
All Classes	U.S. No. 1	403	2,969,456	390	2,756,651	421	2,888,732
	U.S. No. 2	1,817	24,533,927	1,715	22,723,518	1,682	21,042,320
	U.S. No. 3	19	199,434	17	238,138	3	30,510
	U.S. No. 4	8	101,891	1	17,309	2	4,873
	U.S. No. 5	3	70,180	28	402,705	4	69,676
	U.S. Sample						
	Grade	7	140,896	17	134,141	3	37,027
	All lots	2,257	28,015,784	2,170	26,300,010	2,115	24,073,138

-- = No lots reported in this category.

Table 2. Summary of export Hard Red Winter wheat quality, 2000-2002

Factor	Grade	Grade Limit	2000				2001				2002						
			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				U.S. No. 1	U.S. No. 2			
Test Weight (lb/bu)	U.S. No. 1	60.0	91	61.7	60.3	64.4	79	61.6	60.1	63.4	83	61.1	60.1	62.9			
	U.S. No. 2	58.0	666	60.9	58.2	64.0	554	61.0	58.1	63.7	609	60.8	58.4	64.2			
	U.S. No. 3	56.0	1	63.5	63.5	63.5	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	60.9	58.2	64.4	633	61.0	58.1	63.7	692	60.8	58.4	64.2			
Test Weight (kg/hl)	U.S. No. 1	N/A	91	81.2	79.4	84.6	79	81.0	79.1	83.3	83	80.4	79.1	82.7			
	U.S. No. 2	N/A	666	80.1	79.6	84.2	554	80.2	76.5	83.7	609	79.9	76.8	84.4			
	U.S. No. 3	N/A	1	83.4	83.4	83.4	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	80.1	76.6	84.6	633	80.2	76.5	83.7	692	80.0	76.8	84.4			
Moisture	U.S. No. 1	N/A	91	10.5	9.5	11.7	79	10.7	9.0	12.5	83	10.7	8.1	12.2			
	U.S. No. 2	N/A	666	11.8	9.1	13.1	554	11.7	9.2	13.1	609	11.6	9.1	12.9			
	U.S. No. 3	N/A	1	10.4	10.4	10.4	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	11.7	9.1	13.1	633	11.6	9.0	13.1	692	11.5	8.1	12.9			
Heat-damaged Kernels	U.S. No. 1	0.2	91	0.0	0.0	0.1	79	0.0	0.0	0.0	83	0.0	0.0	0.1			
	U.S. No. 2	0.2	666	0.0	0.0	0.2	554	0.0	0.0	0.1	609	0.0	0.0	0.1			
	U.S. No. 3	0.5	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	0.0	0.0	0.2	633	0.0	0.0	0.1	692	0.0	0.0	0.1			
Damaged Kernels (Total)	U.S. No. 1	2.0	91	0.2	0.0	1.2	79	0.2	0.0	1.0	83	0.3	0.0	0.9			
	U.S. No. 2	4.0	666	1.0	0.0	2.6	554	1.1	0.0	3.1	609	1.2	0.0	2.8			
	U.S. No. 3	7.0	1	0.1	0.1	0.1	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	1.0	0.0	2.6	633	1.1	0.0	3.1	692	1.2	0.0	2.8			
Foreign Material	U.S. No. 1	0.4	91	0.2	0.0	0.4	79	0.1	0.0	0.4	83	0.1	0.0	0.4			
	U.S. No. 2	0.7	666	0.2	0.0	0.7	554	0.3	0.0	0.7	609	0.3	0.0	0.7			
	U.S. No. 3	1.3	1	0.2	0.2	0.2	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	0.2	0.0	0.7	633	0.2	0.0	0.7	692	0.3	0.0	0.7			
Shrunken and Broken	U.S. No. 1	3.0	91	1.5	0.7	2.1	79	1.6	1.1	2.4	83	1.8	0.9	2.6			
	U.S. No. 2	5.0	666	1.8	0.6	2.7	554	1.9	0.6	2.6	609	1.9	0.6	2.9			
	U.S. No. 3	8.0	1	1.6	1.6	1.6	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	1.8	0.6	2.7	633	1.9	0.6	2.6	692	1.9	0.6	2.9			
Total Defects¹	U.S. No. 1	3.0	91	1.8	1.1	2.8	79	1.9	1.2	2.9	83	2.3	1.1	3.0			
	U.S. No. 2	5.0	666	3.1	0.8	5.0	554	3.3	0.6	5.0	609	3.3	0.7	4.9			
	U.S. No. 3	8.0	1	1.9	1.9	1.9	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	3.0	0.8	5.0	633	3.2	0.6	5.0	692	3.3	0.7	4.9			
Dockage	U.S. No. 1	N/A	91	0.4	0.2	0.7	79	0.4	0.1	0.5	83	0.3	0.1	0.7			
	U.S. No. 2	N/A	666	0.6	0.1	1.0	550	0.6	0.1	1.6	609	0.6	0.1	1.4			
	U.S. No. 3	N/A	1	0.4	0.4	0.4	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	758	0.6	0.1	1.0	629	0.6	0.1	1.6	692	0.6	0.1	1.4			

continued

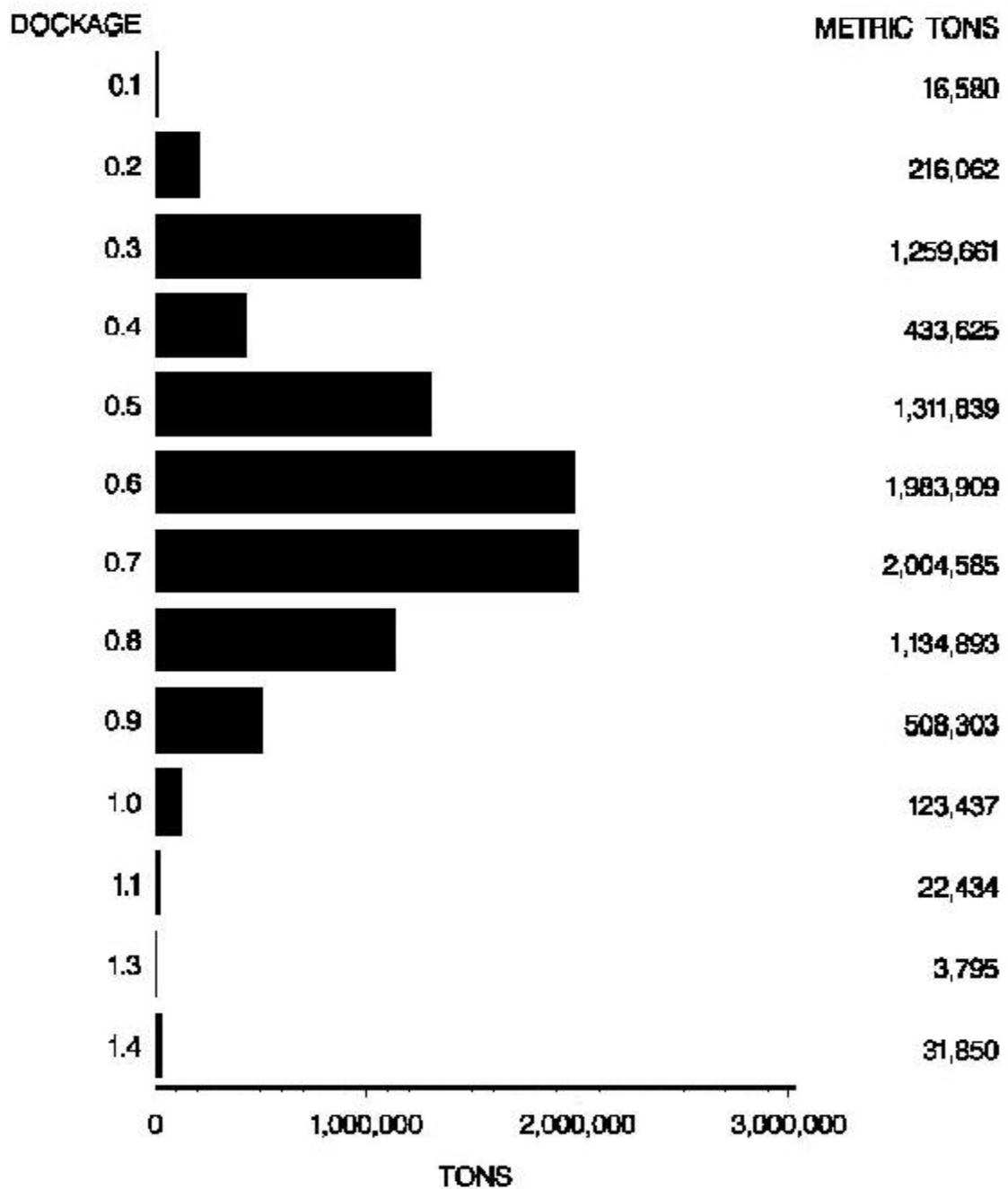
Table 2. Summary of export Hard Red Winter wheat quality, 2000-2002--Continued

Factor	Grade	Grade Limit	2000			2001			2002		
			No. of Lots	Avg.	Low	No. of Lots	Avg.	Low	No. of Lots	Avg.	Low
Wheat of Other Classes	U.S. No. 1	3.0	91	0.8	0.0	3.0	79	0.9	0.0	2.8	83
	U.S. No. 2	5.0	666	1.5	0.0	4.5	554	1.6	0.0	4.5	609
	U.S. No. 3	10.0	1	0.2	0.2	0.2	--	--	--	--	--
	All lots	N/A	758	1.4	0.0	4.5	633	1.5	0.0	4.5	692
Contrasting Classes	U.S. No. 1	1.0	91	0.4	0.0	1.0	79	0.3	0.0	1.0	83
	U.S. No. 2	2.0	666	0.3	0.0	1.6	554	0.3	0.0	1.4	609
	U.S. No. 3	3.0	1	0.2	0.2	0.2	--	--	--	--	--
	All lots	N/A	758	0.3	0.0	1.6	633	0.3	0.0	1.4	692
Protein (as is basis)	U.S. No. 1	N/A	91	12.2	11.1	13.8	79	12.5	11.0	13.7	83
	U.S. No. 2	N/A	632	11.5	9.7	13.5	532	11.8	9.8	13.5	595
	U.S. No. 3	N/A	1	11.7	11.7	11.7	--	--	--	--	--
	All lots	N/A	724	11.5	9.7	13.8	611	11.9	9.8	13.7	678
Protein (12% moisture)	U.S. No. 1	N/A	91	12.0	11.1	13.5	79	12.3	11.1	13.2	83
	U.S. No. 2	N/A	632	11.5	9.4	13.2	532	11.8	9.9	13.3	595
	U.S. No. 3	N/A	1	11.5	11.5	11.5	--	--	--	--	--
	All lots	N/A	724	11.5	9.6	13.5	611	11.8	9.9	13.3	678

N/A = Does not apply.

--=No lots reported in this category.

U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR DOCKAGE – ALL GRADES
HRW



U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES
HRW

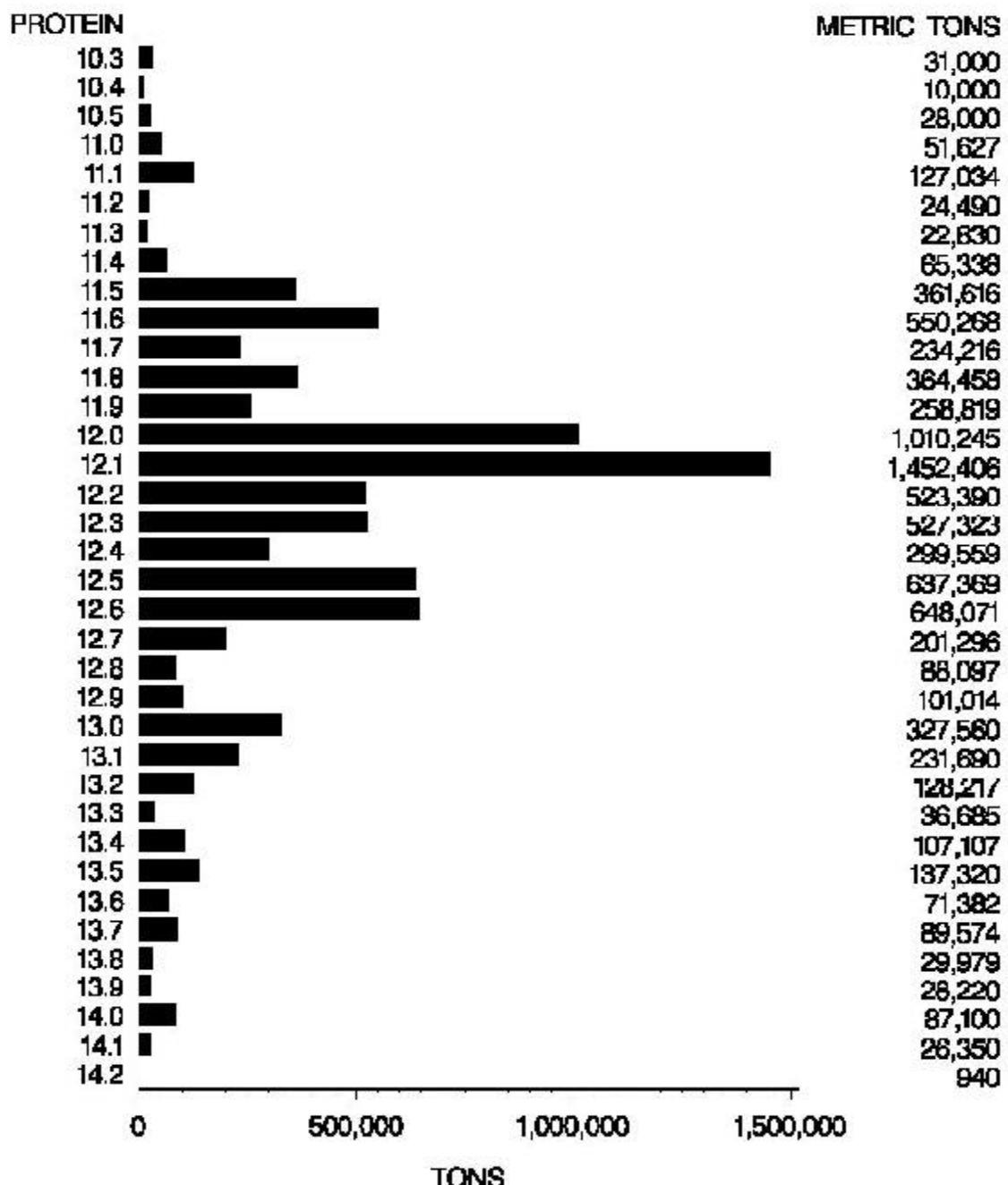


Table 3. Summary of export Hard Red Spring wheat quality, 2000-2002

Factor	Grade	Grade Limit	2000				2001				2002						
			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. 3	U.S. No. 4	All lots	U.S. No. 1	U.S. No. 2	U.S. No. 3	U.S. No. 4	All lots	U.S. No. 1	U.S. No. 2	U.S. No. 3	U.S. No. 4	
Test Weight (lb/bu)	U.S. No. 1	58.0	144	60.7	59.1	62.7	125	61.1	59.7	63.3	125	61.0	59.2	63.0			
	U.S. No. 2	57.0	484	60.6	58.2	62.8	496	60.9	58.8	63.4	493	60.7	58.5	64.4			
	U.S. No. 3	55.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S. No. 4	53.0	--	--	--	--	--	--	--	--	1	60.4	60.4	60.4			
	All lots	N/A	628	60.6	58.2	62.8	621	61.0	58.8	63.4	619	60.8	58.5	64.4			
Test Weight (kg/hl)	U.S. No. 1	N/A	144	79.8	77.8	82.5	125	80.4	78.6	83.2	125	80.2	77.9	82.8			
	U.S. No. 2	N/A	484	79.7	76.6	82.6	496	80.2	77.4	83.3	493	79.9	77.0	84.6			
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	1	79.4	79.4	79.4			
	All lots	N/A	628	79.7	76.6	82.6	621	80.2	77.4	83.3	619	80.0	77.0	84.6			
Moisture	U.S. No. 1	N/A	14	11.6	9.3	13.2	125	11.5	9.7	13.0	125	11.7	9.2	13.5			
	U.S. No. 2	N/A	484	11.9	9.4	13.4	495	11.8	9.6	13.3	493	12.0	9.5	13.4			
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	1	13.4	13.4	13.4			
	All lots	N/A	628	11.9	9.3	13.4	620	11.7	9.6	13.3	619	12.0	9.2	13.5			
Heat-damaged Kernels	U.S. No. 1	0.2	144	0.0	0.0	0.1	125	0.0	0.0	0.0	125	0.0	0.0	0.0			
	U.S. No. 2	0.2	484	0.0	0.0	0.1	496	0.0	0.0	0.1	493	0.0	0.0	0.1			
	U.S. No. 3	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S. No. 4	1.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0			
	All lots	N/A	628	0.0	0.0	0.1	621	0.0	0.0	0.1	619	0.0	0.0	0.1			
Damaged Kernels (Total)	U.S. No. 1	2.0	144	0.6	0.0	1.5	125	0.6	0.0	1.6	125	0.6	0.0	1.4			
	U.S. No. 2	4.0	484	1.0	0.0	2.8	496	1.0	0.0	3.8	493	1.0	0.0	3.3			
	U.S. No. 3	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S. No. 4	10.0	--	--	--	--	--	--	--	--	1	1.5	1.5	1.5			
	All lots	N/A	628	0.69	0.0	2.8	621	0.9	0.0	3.8	619	0.9	0.0	3.3			
Foreign Material	U.S. No. 1	0.4	144	0.1	0.0	0.3	125	0.2	0.1	0.3	125	0.1	0.0	0.3			
	U.S. No. 2	0.7	484	0.2	0.0	0.7	496	0.2	0.0	0.6	493	0.2	0.0	0.5			
	U.S. No. 3	1.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S. No. 4	3.0	--	--	--	--	--	--	--	--	1	0.1	0.1	0.1			
	All lots	N/A	628	0.2	0.0	0.7	621	0.2	0.0	0.6	619	0.2	0.0	0.5			
Shrunken and Broken	U.S. No. 1	3.0	144	1.6	0.7	2.5	125	1.6	1.0	2.4	125	1.6	0.8	2.3			
	U.S. No. 2	5.0	484	1.7	0.2	2.7	496	1.6	0.7	2.7	493	1.6	0.9	3.0			
	U.S. No. 3	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S. No. 4	12.0	--	--	--	--	--	--	--	--	1	1.3	1.3	1.3			
	All lots	N/A	628	1.6	0.2	2.7	621	1.6	0.7	2.7	619	1.6	0.8	3.0			
Total Defects¹	U.S. No. 1	3.0	144	2.3	0.7	3.0	125	2.3	1.2	3.0	125	2.4	0.9	3.0			
	U.S. No. 2	5.0	484	2.8	1.3	5.0	496	2.7	1.2	5.0	493	2.8	1.4	5.0			
	U.S. No. 3	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S. No. 4	10.0	--	--	--	--	--	--	--	--	1	2.9	2.9	2.9			
	All lots	N/A	628	2.7	0.7	5.0	621	2.7	1.2	5.0	619	2.7	0.9	5.0			

continued

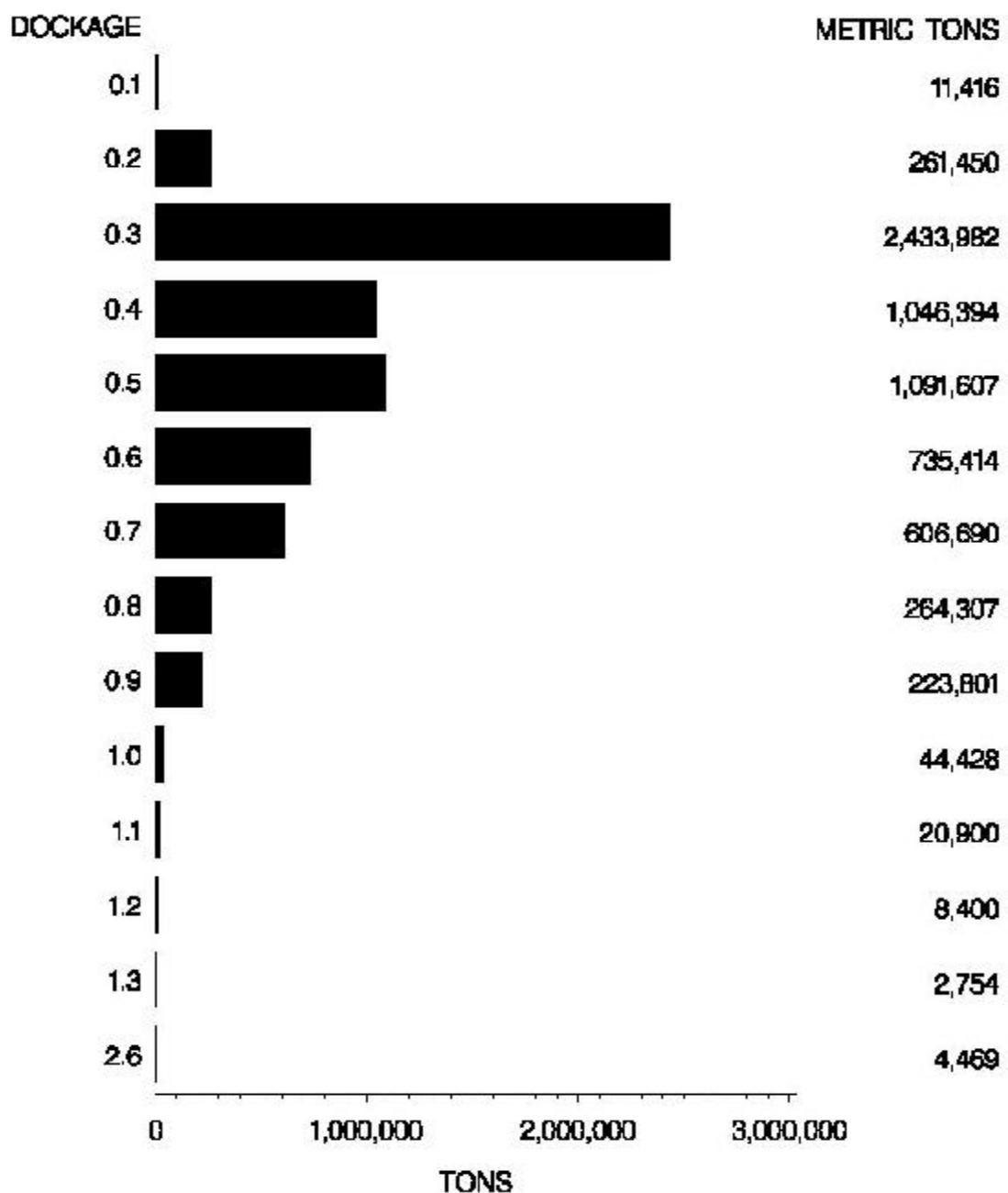
Table 3. Summary of export Hard Red Spring wheat quality, 2000-2002--Continued

Factor	Grade	Grade Limit	2000				2001				2002			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Dockage	U.S. No. 1	N/A	144	0.4	0.1	0.8	125	0.4	0.3	0.7	125	0.4	0.2	0.8
	U.S. No. 2	N/A	483	0.6	0.1	1.6	496	0.5	0.2	1.3	494	0.5	0.1	2.6
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	1	0.8	0.8	0.8
	All lots	N/A	627	0.6	0.1	1.6	621	0.5	0.2	1.3	620	0.5	0.1	2.6
Wheat of Other Classes	U.S. No. 1	3.0	144	0.4	0.0	2.6	125	0.6	0.0	2.5	125	0.7	0.0	2.8
	U.S. No. 2	5.0	484	0.8	0.0	4.6	496	1.1	0.0	4.8	493	1.3	0.0	5.0
	U.S. No. 3	10.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 4	10.0	--	--	--	--	--	--	--	--	1	3.7	3.7	3.7
	All lots	N/A	628	0.7	0.0	4.6	621	1.0	0.0	4.8	619	1.2	0.0	5.0
Contrasting Classes	U.S. No. 1	1.0	144	0.3	0.0	0.9	125	0.3	0.0	0.8	125	0.2	0.0	0.9
	U.S. No. 2	2.0	484	0.3	0.0	2.0	496	0.3	0.0	1.9	493	0.3	0.0	1.5
	U.S. No. 3	3.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 4	10.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	All lots	N/A	628	0.3	0.0	2.0	621	0.3	0.0	1.9	619	0.3	0.0	1.5
Protein (as is basis)	U.S. No. 1	N/A	142	14.3	13.6	15.5	123	14.4	13.4	15.3	124	14.5	13.9	15.2
	U.S. No. 2	N/A	481	14.0	12.3	15.4	493	14.1	12.8	15.8	488	14.4	12.4	16.2
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	1	14.2	14.2	14.2
	All lots	N/A	623	14.1	12.3	15.5	616	14.2	12.8	15.8	613	14.5	12.4	16.2
Protein (12% moisture)	U.S. No. 1	N/A	142	14.3	13.8	15.4	123	14.3	13.5	15.3	124	14.5	14.0	15.3
	U.S. No. 2	N/A	481	14.0	12.3	15.1	493	14.1	12.9	15.4	488	14.4	12.5	16.3
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	1	14.4	14.4	14.4
	All lots	N/A	623	14.1	12.3	15.4	616	14.1	12.9	15.4	613	14.4	12.5	16.3

N/A = Does not apply.

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

U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR DOCKAGE - ALL GRADES
HRS



U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR PROTEIN (12% M) - ALL GRADES
HRS

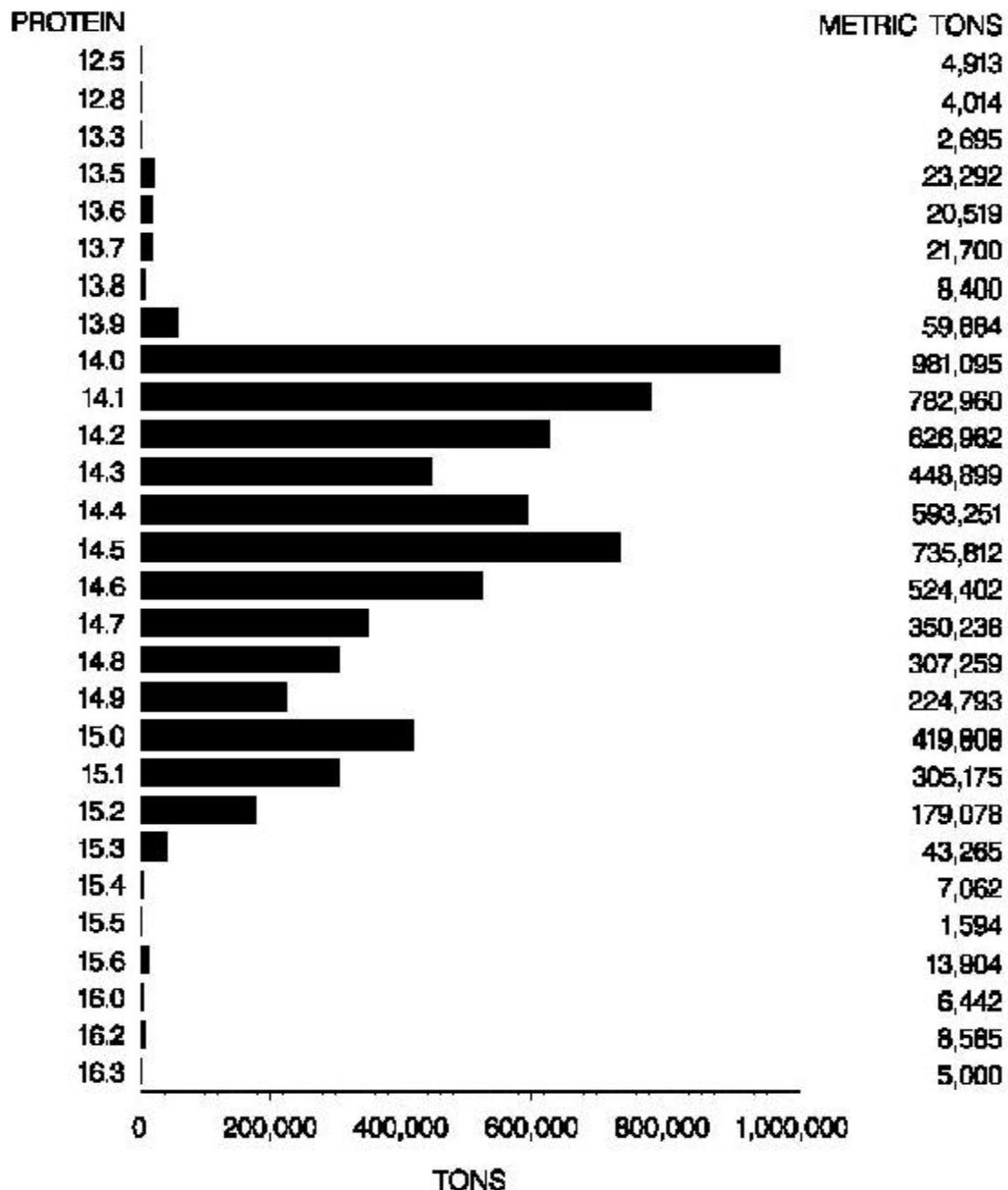


Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002					
			No. of Lots	No. of		No. of Lots	No. of		No. of Lots	No. of				
				Avg.	Low	High	Avg.	Low	High					
Test Weight (lb/bu)	U.S. No. 1	60.0	--	--	--	--	5	60.1	60.0	60.3	1	60.3	60.3	60.3
	U.S. No. 2	58.0	367	59.0	58.0	61.4	373	59.6	58.0	62.8	315	59.4	58.0	62.0
	U.S. No. 3	56.0	9	57.7	56.4	59.5	4	58.1	57.3	59.8	1	59.9	59.9	59.9
	U.S. No. 4	54.0	1	56.7	56.7	56.7	--	--	--	--	--	--	--	--
	U.S. No. 5		1	58.9	58.9	58.9	--	--	--	--	--	--	--	--
	U.S. Sample Grade		3	58.2	55.6	59.2	--	--	--	--	--	--	--	--
	All lots	N/A	381	59.0	55.6	61.4	382	59.6	57.3	62.8	317	59.4	58.0	62.0
Test Weight (kg/hl)	U.S. No. 1	N/A	--	--	--	--	5	79.0	78.9	79.3	1	79.3	79.3	79.3
	U.S. No. 2	N/A	367	77.7	76.4	80.8	373	78.4	76.4	82.6	315	78.1	76.4	81.5
	U.S. No. 3	N/A	9	75.9	74.3	78.3	4	76.4	75.5	78.7	1	78.8	78.8	78.8
	U.S. No. 4	N/A	1	74.7	74.7	74.7	--	--	--	--	--	--	--	--
	U.S. No. 5	N/A	1	77.5	77.5	77.5	--	--	--	--	--	--	--	--
	U.S. Sample Grade		3	76.7	73.2	77.9	--	--	--	--	--	--	--	--
	All lots	N/A	381	77.7	73.2	80.8	382	78.4	75.5	82.6	317	78.1	76.4	81.5
Moisture	U.S. No. 1	N/A	--	--	--	--	5	12.8	12.7	13.3	1	12.5	12.5	12.5
	U.S. No. 2	N/A	367	12.8	9.9	13.4	373	12.8	10.4	13.5	315	12.8	11.9	13.5
	U.S. No. 3	N/A	9	12.9	12.4	13.2	4	12.7	12.3	13.3	1	12.8	12.8	12.8
	U.S. No. 4	N/A	1	13.0	13.0	13.0	--	--	--	--	--	--	--	--
	U.S. No. 5		1	12.6	12.6	12.6	--	--	--	--	--	--	--	--
	U.S. Sample Grade		2	13.4	12.7	13.2	--	--	--	--	--	--	--	--
	All lots	N/A	380	12.8	9.9	13.4	382	12.8	10.4	13.5	317	12.8	11.9	13.5
Heat-damaged Kernels	U.S. No. 1	0.2	--	--	--	--	5	0.0	0.0	0.0	1	0.0	0.0	0.0
	U.S. No. 2	0.2	367	0.0	0.0	0.1	373	0.0	0.0	0.1	315	0.0	0.0	0.2
	U.S. No. 3	0.5	9	0.0	0.0	0.1	4	0.0	0.0	0.0	1	0.0	0.0	0.0
	U.S. No. 4	1.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S. No. 5		1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S. Sample Grade		3	0.0	0.0	0.1	--	--	--	--	--	--	--	--
	All lots	N/A	381	0.0	0.0	0.1	382	0.0	0.0	0.1	317	0.0	0.0	0.2
Damaged Kernels (Total)	U.S. No. 1	2.0	--	--	--	--	5	0.9	0.5	1.3	1	1.6	1.6	1.6
	U.S. No. 2	4.0	367	1.8	0.4	3.7	373	2.1	0.2	3.8	315	2.0	0.4	3.8
	U.S. No. 3	7.0	9	2.5	1.1	3.6	4	2.2	1.3	2.9	1	1.1	1.1	1.1
	U.S. No. 4	10.0	1	9.7	9.7	9.7	--	--	--	--	--	--	--	--
	U.S. No. 5		1	13.2	13.2	13.2	--	--	--	--	--	--	--	--
	U.S. Sample Grade		3	12.8	9.7	13.2	--	--	--	--	--	--	--	--
	All lots	N/A	381	2.1	0.4	13.2	382	2.1	0.2	3.8	317	2.0	0.4	3.8

continued

Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 2000-2002--Continued

Factor	Grade	1999						2000						2001					
		Grade Limit	No. of Lots																
			Avg.	Low	High														
Foreign Material	U.S. No. 1	0.4	--	--	--	5	0.2	0.1	0.2	1	0.2	0.2	0.2	0.2	0.2				
	U.S. No. 2	0.7	366	0.2	0.0	0.6	373	0.1	0.0	0.5	315	0.1	0.0	0.6	0.6				
	U.S. No. 3	1.3	9	0.1	0.1	0.4	4	0.2	0.1	0.5	1	0.1	0.1	0.1	0.1				
	U.S. No. 4	3.0	1	0.1	0.1	0.1	--	--	--	--	--	--	--	--	--				
	U.S. No. 5		1	0.2	0.2	0.2	--	--	--	--	--	--	--	--	--				
	U.S. Sample Grade		3	0.2	0.2	0.2	--	--	--	--	--	--	--	--	--				
	All lots	N/A	380	0.2	0.0	0.6	382	0.1	0.0	0.5	317	0.1	0.0	0.6	0.6				
	Shrunken and Broken	U.S. No. 1	3.0	--	--	--	5	0.6	0.5	0.6	1	0.5	0.5	0.5	0.5				
	U.S. No. 2	5.0	366	0.8	0.4	1.8	373	0.8	0.3	1.4	315	0.9	0.3	1.9	1.9				
	U.S. No. 3	8.0	9	0.7	0.5	1.2	4	0.8	0.6	1.1	1	0.7	0.7	0.7	0.7				
Total Defects¹	U.S. No. 4	12.0	1	0.9	0.9	0.9	--	--	--	--	--	--	--	--	--				
	U.S. No. 5		1	0.9	0.9	0.9	--	--	--	--	--	--	--	--	--				
	U.S. Sample Grade		3	0.9	0.8	0.9	--	--	--	--	--	--	--	--	--				
	All lots	N/A	380	0.8	0.4	1.8	382	0.8	0.3	1.4	317	0.9	0.3	1.9	1.9				
	Dockage	U.S. No. 1	N/A	--	--	--	5	0.8	0.5	0.9	1	0.6	0.6	0.6	0.6				
	U.S. No. 2	N/A	364	0.7	0.1	1.3	369	0.7	0.3	1.0	310	0.7	0.3	1.4	1.4				
	U.S. No. 3	N/A	9	0.7	0.5	0.8	4	0.7	0.5	0.8	1	0.6	0.6	0.6	0.6				
	U.S. No. 4	N/A	1	1.0	1.0	1.0	--	--	--	--	--	--	--	--	--				
	U.S. No. 5		1	0.8	0.8	0.8	--	--	--	--	--	--	--	--	--				
	U.S. Sample Grade		3	0.9	0.8	1.5	--	--	--	--	--	--	--	--	--				
Wheat of Other Classes	All lots	N/A	378	0.7	0.1	1.5	378	0.7	0.3	1.0	312	0.7	0.3	1.4	1.4				

continued

Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 2000-2002--Continued

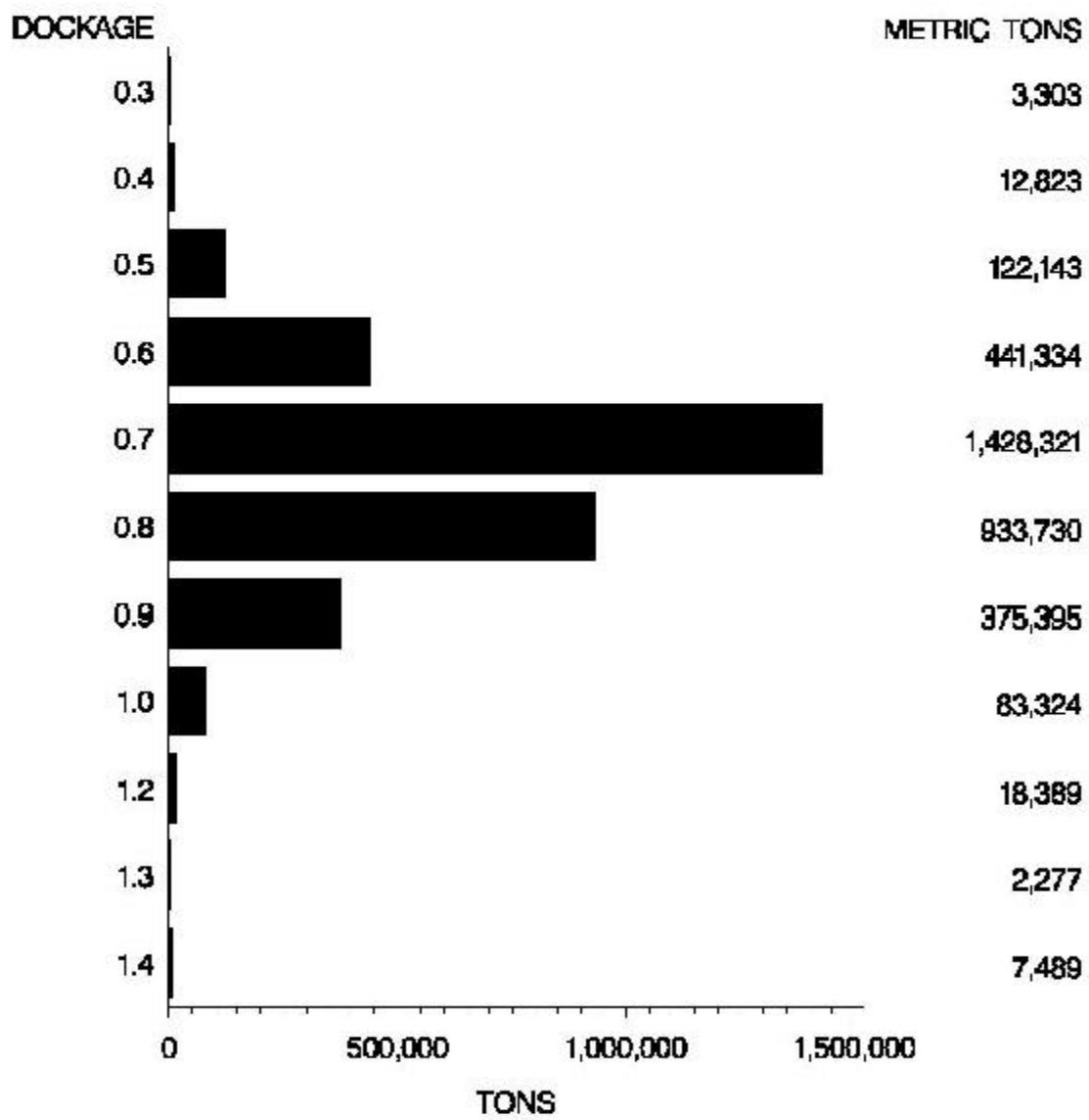
Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots			No. of Lots			No. of Lots			
			Avg.	Low	High	Avg.	Low	High	Avg.	Low	High	
Contrasting Classes	U.S. No. 1	1.0	--	--	--	5	0.0	0.0	0.0	1	0.0	0.0
	U.S. No. 2	2.0	367	0.1	0.0	1.5	373	0.1	0.0	1.7	315	0.0
	U.S. No. 3	3.0	9	0.0	0.0	0.1	4	0.0	0.0	0.0	1	0.0
	U.S. No. 4	10.0	1	0.0	0.0	0.0	--	--	--	--	--	--
	U.S. No. 5		1	0.0	0.0	0.0	--	--	--	--	--	--
	U.S. Sample Grade		3	0.0	0.0	0.0	--	--	--	--	--	--
	All lots	N/A	381	0.1	0.0	1.5	382	0.1	0.0	1.7	317	0.0
	U.S. No. 1	N/A	--	--	--	4	10.2	10.1	10.4	1	11.0	11.0
	U.S. No. 2	N/A	227	10.0	9.3	11.1	300	10.2	9.5	13.0	265	10.3
	U.S. No. 3	N/A	6	10.0	9.7	10.4	3	10.0	9.4	10.2	--	--
Protein (as is basis)	U.S. No. 4	10.0	--	--	--	--	--	--	--	--	--	--
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade		--	--	--	--	--	--	--	--	--	--
	All lots	N/A	233	10.0	9.3	11.1	307	10.2	9.4	13.0	266	10.3
	U.S. No. 1	N/A	--	--	--	4	10.3	10.2	10.5	1	11.1	11.1
	U.S. No. 2	N/A	227	10.1	9.4	11.3	300	10.3	9.6	13.2	265	10.4
	U.S. No. 3	N/A	6	10.1	9.7	10.5	3	10.1	9.5	10.3	--	--
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade		--	--	--	--	--	--	--	--	--	--
	All lots	N/A	233	10.1	9.4	11.3	307	10.3	9.5	13.2	266	10.4
Protein (12% moisture)	U.S. No. 1	N/A	--	--	--	4	10.3	10.2	10.5	1	11.1	11.1
	U.S. No. 2	N/A	227	10.1	9.4	11.3	300	10.3	9.6	13.2	265	10.4
	U.S. No. 3	N/A	6	10.1	9.7	10.5	3	10.1	9.5	10.3	--	--
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade		--	--	--	--	--	--	--	--	--	--
	All lots	N/A	233	10.1	9.4	11.3	307	10.3	9.5	13.2	266	10.4
	U.S. No. 1	N/A	--	--	--	4	10.3	10.2	10.5	1	11.1	11.1
	U.S. No. 2	N/A	227	10.1	9.4	11.3	300	10.3	9.6	13.2	265	10.4
	U.S. No. 3	N/A	6	10.1	9.7	10.5	3	10.1	9.5	10.3	--	--
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--

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

N/A = Does not apply.

-- = No lots reported in this category.

U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR DOCKAGE – ALL GRADES
SRW



U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES
SRW

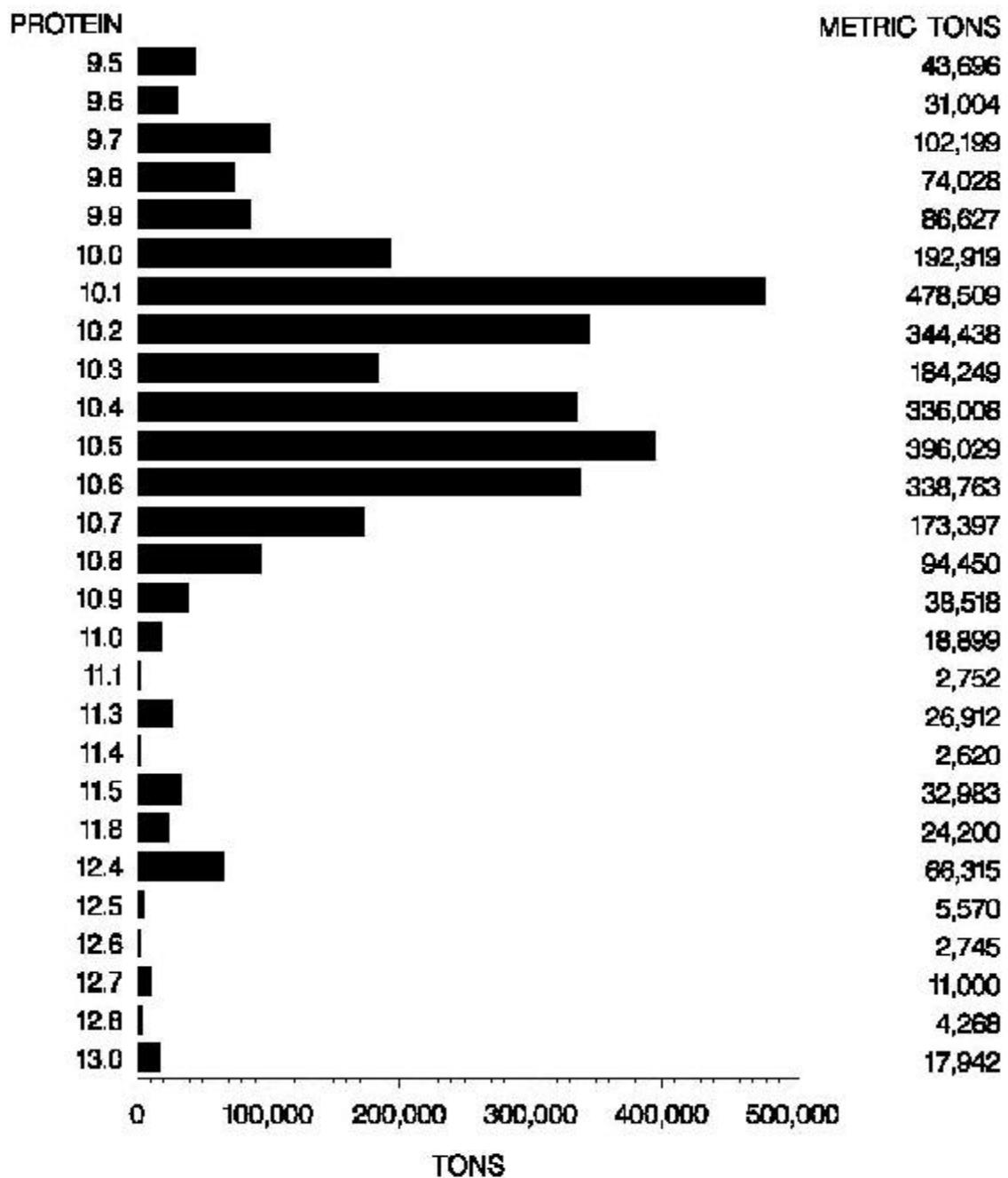


Table 5. Summary of export Durum wheat quality, factor averages by grade, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002					
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High		
			No. of Lots	Avg.				No. of Lots	Avg.					
Test Weight (lb/bu)	U.S. No. 1	60.0	29	62.6	60.8	63.6	21	62.3	61.2	63.6	38	62.5	60.3	63.7
	U.S. No. 2	58.0	56	60.3	58.3	63.0	39	60.9	59.9	63.3	50	60.7	59.7	63.4
	U.S. No. 3	56.0	9	59.5	58.6	60.3	13	60.0	59.0	60.3	2	60.2	59.3	60.3
	U.S. No. 4	54.0	7	59.0	58.7	59.4	1	59.4	59.4	59.4	1	58.6	58.6	58.6
	U.S. No. 5		2	59.8	59.4	60.0	28	58.5	57.7	59.5	4	58.0	57.9	58.5
	U.S. Sample													
	Grade	N/A	4	58.5	58.4	58.7	17	58.6	56.5	60.5	3	58.1	58.0	59.3
	All lots	N/A	107	60.5	58.3	63.6	119	59.9	56.5	63.6	98	61.0	57.9	63.7
	Test Weight (kg/hl)													
	U.S. No. 1	N/A	29	81.5	79.1	82.8	21	81.1	79.7	82.7	38	81.4	78.5	83.0
Moisture	U.S. No. 2	N/A	56	78.5	76.0	82.1	39	79.4	78.0	82.4	50	79.0	77.7	82.5
	U.S. No. 3	N/A	9	77.6	76.4	78.5	13	78.1	76.8	78.6	2	78.4	77.2	78.6
	U.S. No. 4	N/A	7	76.9	75.6	77.4	1	77.3	77.3	77.3	1	76.3	76.3	76.3
	U.S. No. 5		2	77.9	77.3	78.2	28	76.2	75.1	77.4	4	75.5	75.4	76.3
	U.S. Sample													
	Grade	N/A	4	76.2	76.0	76.5	17	76.3	73.6	78.7	3	75.7	75.6	77.2
	All lots	N/A	107	78.7	76.0	82.8	119	78.0	73.6	82.7	98	79.4	75.4	83.0
	Heat-damaged Kernels													
	U.S. No. 1	0.2	29	0.0	0.0	0.0	21	0.0	0.0	0.0	38	0.0	0.0	0.1
	U.S. No. 2	0.2	56	0.0	0.0	0.1	39	0.0	0.0	0.0	50	0.0	0.0	0.0
Damaged Kernels (Total)	U.S. No. 3	0.5	9	0.0	0.0	0.1	13	0.0	0.0	0.0	2	0.0	0.0	0.0
	U.S. No. 4	1.0	7	0.0	0.0	0.0	1	0.0	0.0	0.0	1	0.0	0.0	0.0
	U.S. No. 5		2	0.0	0.0	0.0	28	0.0	0.0	0.0	4	0.0	0.0	0.0
	U.S. Sample													
	Grade	N/A	4	0.0	0.0	0.0	17	0.0	0.0	0.2	3	0.0	0.0	0.0
	All lots	N/A	107	0.0	0.0	0.1	119	0.0	0.0	0.2	98	0.0	0.0	0.1
	Damaged Kernels (Total)													
	U.S. No. 1	2.0	29	1.1	0.5	1.9	21	0.9	0.2	1.3	38	0.8	0.2	1.5
	U.S. No. 2	4.0	56	2.5	0.2	3.1	39	2.3	0.0	3.6	50	2.3	0.4	3.1
	U.S. No. 3	7.0	9	4.9	3.1	5.3	13	5.6	4.7	6.1	2	5.0	4.1	5.1
	U.S. No. 4	10.0	7	7.2	4.0	8.8	1	9.2	9.2	9.2	1	6.7	6.7	6.7
	U.S. No. 5		2	9.8	8.5	13.7	28	11.0	8.2	13.0	4	11.0	8.9	12.8
	U.S. Sample													
	Grade	N/A	4	9.4	3.7	15.5	17	15.1	5.4	19.2	3	10.9	10.6	15.4
	All lots	N/A	107	3.5	0.2	15.5	119	7.2	0.0	19.2	98	2.9	0.2	15.4

N/A = Does not apply.

-- = No lots reported in this category.

continued

Table 5. Summary of export Durum wheat quality, factor averages by grade, 1999-2001--Continued

Factor	Grade	Grade Limit	1999				2000				2001			
			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	High	Avg.	Low	High		
Foreign Material	U.S. No. 1	0.4	29	0.2	0.1	0.4	21	0.2	0.1	0.3	38	0.2	0.1	0.4
	U.S. No. 2	0.7	56	0.2	0.1	0.6	39	0.2	0.1	0.5	50	0.2	0.1	0.6
	U.S. No. 3	1.3	9	0.3	0.2	0.4	13	0.3	0.2	0.5	2	0.2	0.2	0.2
	U.S. No. 4	3.0	7	0.4	0.2	0.8	1	0.3	0.3	0.3	1	0.5	0.5	0.5
	U.S. No. 5		2	0.3	0.2	0.7	28	0.4	0.2	0.7	4	0.5	0.3	0.8
	U.S. Sample													
	Grade	N/A	4	0.4	0.2	0.8	17	0.4	0.2	0.7	3	0.4	0.3	0.5
	All lots	N/A	107	0.3	0.1	0.8	119	0.3	0.1	0.7	98	0.2	0.1	0.8
	Shrunken and Broken													
	U.S. No. 1	3.0	29	0.6	0.3	1.2	21	0.7	0.5	1.7	38	0.7	0.3	1.9
	U.S. No. 2	5.0	56	1.6	0.5	2.0	39	1.5	0.4	2.0	50	1.8	0.4	2.2
	U.S. No. 3	8.0	9	1.9	1.4	2.2	13	1.7	1.4	2.0	2	1.6	1.6	2.1
	U.S. No. 4	12.0	7	2.1	1.9	2.2	1	2.0	2.0	2.0	1	2.4	2.4	2.4
	U.S. No. 5		2	2.2	2.1	2.3	28	2.2	1.9	2.7	4	2.4	2.3	3.1
	U.S. Sample													
	Grade	N/A	4	2.3	2.2	2.4	17	2.3	1.2	2.6	3	2.7	2.4	2.9
	All lots	N/A	17	1.5	0.3	2.4	119	1.8	0.4	2.7	98	1.5	0.3	3.1
Total Defects¹	U.S. No. 1	3.0	29	1.9	1.2	2.9	21	1.8	0.9	2.9	38	1.6	0.8	2.9
	U.S. No. 2	5.0	56	4.4	1.1	4.9	39	4.0	1.3	5.0	50	4.3	1.0	5.0
	U.S. No. 3	8.0	9	7.1	5.1	7.5	13	7.6	6.4	8.0	2	6.9	6.4	6.9
	U.S. No. 4	12.0	7	9.7	6.4	11.2	1	11.5	11.5	11.5	1	9.6	9.6	9.6
	U.S. No. 5		2	12.3	10.8	16.7	28	13.6	10.5	15.2	4	13.9	12.5	16.7
	U.S. Sample													
	Grade	N/A	4	12.1	6.3	18.7	17	17.8	7.0	21.5	3	14.0	13.7	18.3
	All lots	N/A	107	5.2	1.1	18.7	119	9.2	0.9	21.5	98	4.6	0.8	18.3
	Dockage													
	U.S. No. 1	N/A	29	0.5	0.2	1.0	22	0.5	0.1	0.7	38	0.5	0.3	0.9
	U.S. No. 2	N/A	56	0.6	0.1	1.0	37	0.7	0.3	1.2	48	0.7	0.1	1.2
	U.S. No. 3	N/A	9	0.7	0.5	0.8	13	0.6	0.6	0.7	2	0.8	0.8	0.8
	U.S. No. 4	N/A	7	0.7	0.7	0.9	1	0.7	0.7	0.7	1	0.7	0.7	0.7
	U.S. No. 5		2	1.0	0.8	1.1	27	0.8	0.6	1.0	4	0.9	0.9	0.9
	U.S. Sample													
	Grade	N/A	4	0.9	0.8	1.2	17	0.8	0.5	1.6	3	1.0	0.9	1.0
	All lots	N/A	107	0.6	0.1	1.2	117	0.7	0.1	1.6	96	0.6	0.1	1.2
Contrasting Classes	U.S. No. 1	1.0	29	0.1	0.0	0.5	21	0.1	0.0	0.9	38	0.2	0.0	0.8
	U.S. No. 2	2.0	56	0.7	0.0	2.0	39	0.9	0.0	1.9	50	0.9	0.1	2.0
	U.S. No. 3	3.0	9	0.9	0.3	1.6	13	0.9	0.0	2.2	2	0.9	0.9	1.0
	U.S. No. 4	10.0	7	1.0	0.7	1.2	1	1.1	1.1	1.1	1	1.0	1.0	1.0
	U.S. No. 5		2	1.4	0.7	1.6	28	1.6	0.5	5.9	4	1.3	0.8	1.4
	U.S. Sample													
	Grade	N/A	4	0.8	0.0	1.3	17	2.1	0.2	6.9	3	1.5	0.8	1.7
	All lots	N/A	107	0.6	0.0	2.0	119	1.1	0.0	6.9	98	0.7	0.0	2.0

N/A = Does not apply.

-- = No lots reported in this category.

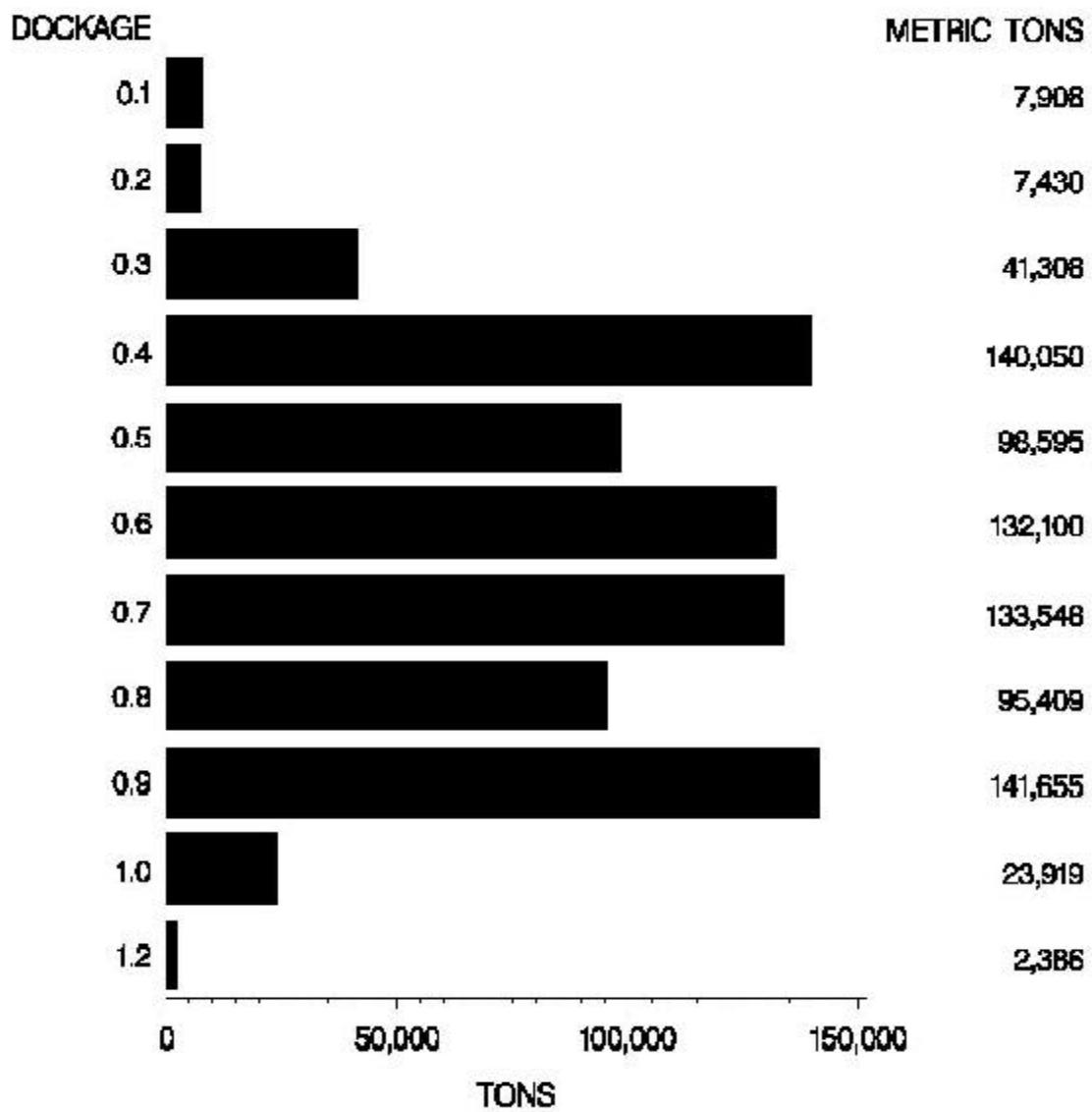
continued

Table 5. Summary of export Durum wheat quality, factor averages by grade, 2000-2002--Continued

Factor	Grade	Grade Limit	2000			2001			2002					
			No. of Lots	No. of		No. of Lots	No. of		No. of Lots	No. of				
				Avg.	Low	High	Avg.	Low	High					
Protein (as is basis)	U.S. No. 1	N/A	19	14.4	13.5	15.5	14	14.9	12.8	16.0	33	14.0	12.0	15.1
	U.S. No. 2	N/A	17	13.6	12.3	15.0	16	14.1	13.4	15.6	14	13.9	13.3	14.3
	U.S. No. 3	N/A	--	--	--	--	2	14.1	14.1	14.2	1	14.1	14.1	14.1
	U.S. No. 4	N/A	3	14.0	13.8	14.2	1	14.2	14.2	14.2	1	14.1	14.1	14.1
	U.S. No. 5	--	--	--	--	--	13	14.2	14.1	14.5	--	--	--	--
	U.S. Sample													
	Grade	N/A	1	14.1	14.1	14.1	3	14.6	14.2	14.8	--	--	--	--
	All lots	N/A	40	14.1	12.3	15.5	49	14.4	12.8	16.0	49	13.9	12.0	15.1
	U.S. No. 1	N/A	19	13.7	12.8	14.6	14	13.9	12.1	14.4	33	13.2	11.4	14.5
	U.S. No. 2	N/A	17	13.7	12.5	14.2	16	14.0	13.0	15.3	14	13.9	13.1	14.2
Protein (12% moisture)	U.S. No. 3	N/A	--	--	--	--	2	14.2	14.2	14.2	1	14.1	14.1	14.1
	U.S. No. 4	N/A	3	14.1	13.9	14.3	1	14.3	14.3	14.3	1	14.2	14.2	14.2
	U.S. No. 5	--	--	--	--	--	13	14.3	14.2	14.5	--	--	--	--
	U.S. Sample													
	Grade	N/A	1	14.2	14.2	14.2	3	14.7	14.3	14.9	--	--	--	--
	All lots	N/A	40	13.8	12.5	14.6	49	14.1	12.1	15.3	49	13.4	11.4	14.5

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

U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR DOCKAGE – ALL GRADES
DU



U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR DOCKAGE – ALL GRADES
DU

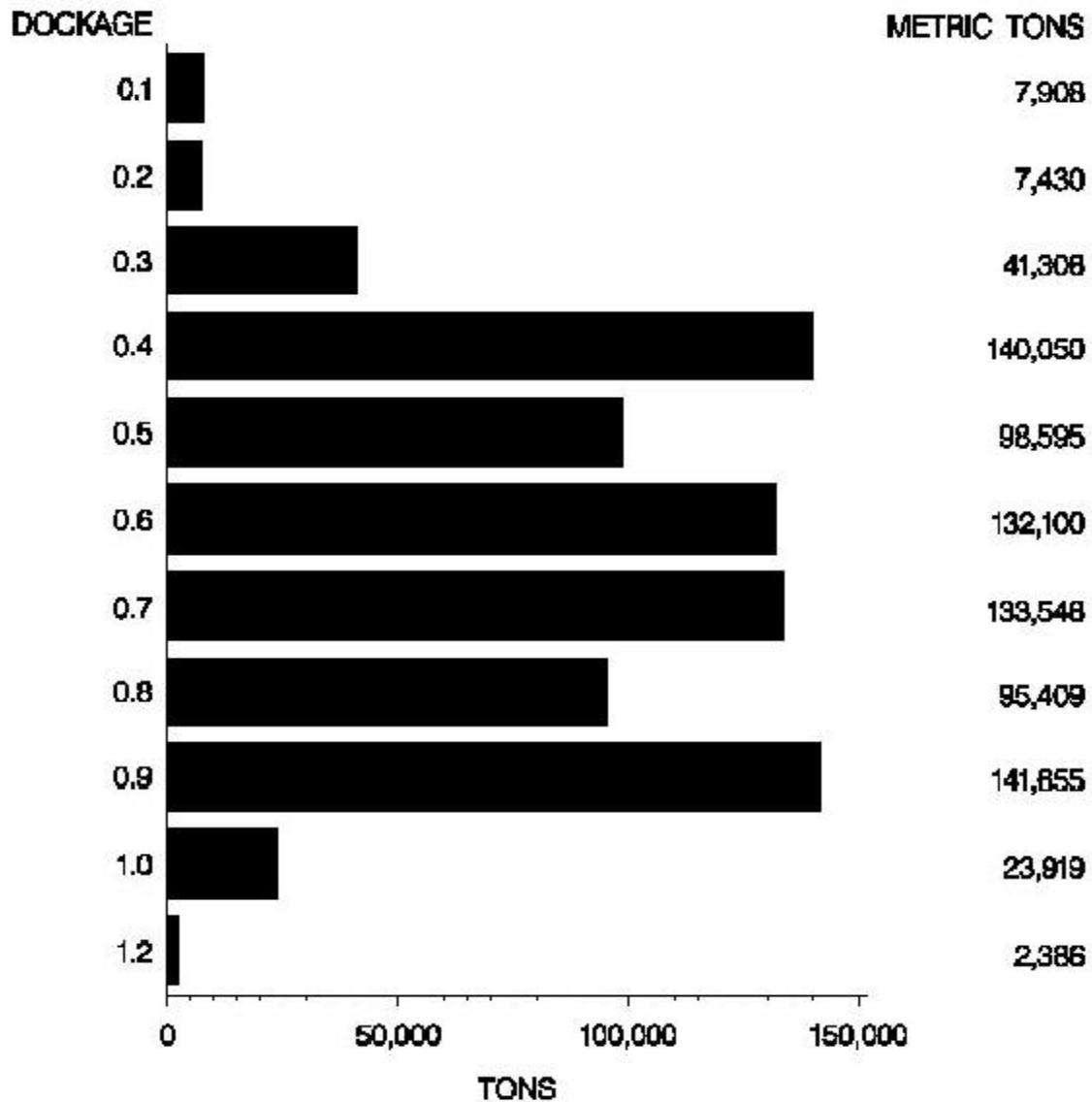


Table 6. Summary of export Soft White wheat quality, factor averages by grade, 2000-2002

Factor	Grade	Grade Limit	2000				2001				2002						
			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	
Test Weight (lb/bu)	U.S. No. 1	60.0	139	61.7	60.3	63.5	159	62.0	60.4	65.0	174	61.7	60.3	63.0			
	U.S. No. 2	58.0	240	61.6	60.0	63.4	249	61.8	59.5	63.3	207	61.5	59.6	63.2			
	All lots	N/A	379	61.6	60.0	63.5	408	61.8	59.5	65.0	381	61.5	59.6	63.2			
Test Weight (kg/hl)	U.S. No. 1	N/A	139	81.1	79.3	83.5	159	81.5	79.5	85.4	174	81.2	79.3	82.8			
	U.S. No. 2	N/A	240	81.0	78.9	83.3	249	81.3	78.3	83.2	207	80.9	78.4	83.1			
	All lots	N/A	379	81.0	78.9	83.5	408	81.3	78.3	85.4	381	80.9	78.4	83.1			
Moisture	U.S. No. 1	N/A	139	9.9	8.6	11.3	159	9.7	8.8	12.4	174	10.0	8.7	11.8			
	U.S. No. 2	N/A	240	9.8	8.8	12.5	249	9.7	8.6	12.7	207	9.8	8.8	10.9			
	All lots	N/A	379	9.8	8.6	12.5	408	9.7	8.6	12.7	381	9.8	8.7	11.8			
Heat-damaged Kernels	U.S. No. 1	0.2	139	0.0	0.0	0.1	159	0.0	0.0	0.0	174	0.0	0.0	0.1			
	U.S. No. 2	0.2	240	0.0	0.0	0.1	249	0.0	0.0	0.0	207	0.0	0.0	0.1			
	All lots	N/A	379	0.0	0.0	0.1	408	0.0	0.0	0.0	381	0.0	0.0	0.1			
Damaged Kernels (Total)	U.S. No. 1	2.0	139	0.1	0.0	0.7	159	0.1	0.0	1.0	174	0.2	0.0	1.3			
	U.S. No. 2	4.0	240	0.1	0.0	1.3	249	0.2	0.0	1.8	207	0.1	0.0	0.5			
	All lots	N/A	379	0.1	0.0	1.3	408	0.2	0.0	1.8	381	0.1	0.0	1.3			
Foreign Material	U.S. No. 1	0.4	139	0.1	0.0	0.4	159	0.2	0.0	0.4	174	0.1	0.0	0.4			
	U.S. No. 2	0.7	240	0.2	0.0	0.5	249	0.2	0.0	0.6	207	0.2	0.0	0.5			
	All lots	N/A	379	0.2	0.0	0.5	408	0.2	0.0	0.6	381	0.2	0.0	0.5			
Shrunken and Broken	U.S. No. 1	3.0	139	1.0	0.4	1.5	159	1.0	0.4	2.3	174	1.1	0.5	1.8			
	U.S. No. 2	5.0	240	1.0	0.5	2.0	249	1.0	0.5	2.1	207	1.2	0.8	1.8			
	All lots	N/A	379	1.0	0.4	2.0	408	1.0	0.4	2.3	381	1.2	0.5	1.8			
Total Defects¹	U.S. No. 1	3.0	139	1.2	0.5	1.9	159	1.3	0.6	2.5	174	1.4	0.8	2.6			
	U.S. No. 2	5.0	240	1.3	0.6	2.2	249	1.3	0.6	3.0	207	1.4	1.0	2.1			
	All lots	N/A	379	1.3	0.5	2.2	408	1.3	0.6	3.0	381	1.4	0.8	2.6			
Dockage	U.S. No. 1	N/A	139	0.4	0.2	0.7	159	0.4	0.1	0.6	174	0.3	0.1	0.5			
	U.S. No. 2	N/A	240	0.5	0.2	10.4	247	0.4	0.1	1.1	206	0.4	0.2	0.7			
	All lots	N/A	379	0.5	0.2	10.4	406	0.4	0.1	1.1	380	0.4	0.1	0.7			
Wheat of Other Classes	U.S. No. 1	3.0	139	0.3	0.0	1.4	159	0.3	0.0	1.0	174	0.3	0.0	1.0			
	U.S. No. 2	5.0	240	0.5	0.0	1.7	249	0.7	0.0	2.3	207	0.5	0.0	3.8			
	All lots	N/A	379	0.5	0.0	1.7	408	0.6	0.0	2.3	381	0.4	0.0	3.8			
Contrasting Classes	U.S. No. 1	1.0	139	0.3	0.0	1.0	159	0.3	0.0	1.0	174	0.3	0.0	1.0			
	U.S. No. 2	2.0	240	0.5	0.0	1.7	249	0.7	0.0	1.9	207	0.4	0.0	1.4			
	All lots	N/A	379	0.5	0.0	1.7	408	0.6	0.0	1.9	381	0.4	0.0	1.4			

continued

Table 6. Summary of export Soft White wheat quality, factor averages by grade, 2000-2002--Continued

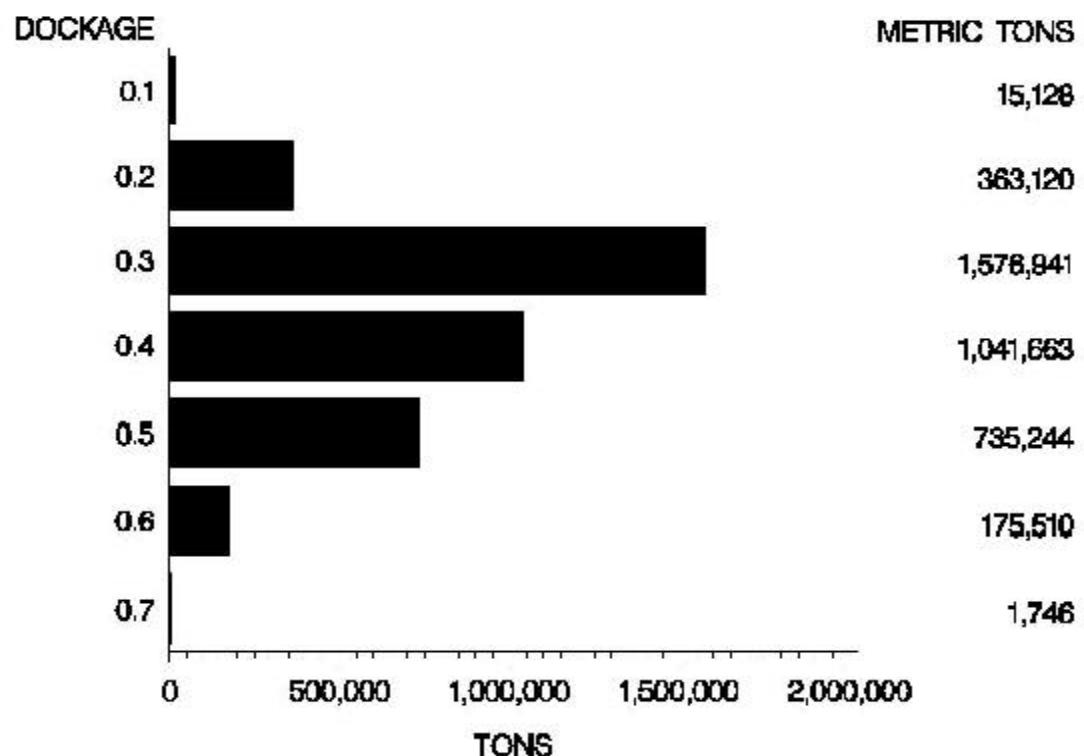
Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			Avg.	Low				Avg.	Low			
Protein (as is basis)	U.S. No. 1	N/A	139	10.1	8.8	11.6	156	10.0	8.0	11.8	172	10.3
	U.S. No. 2	N/A	218	10.1	9.0	11.2	224	10.1	0.4	11.5	187	10.8
	All lots	N/A	357	10.1	8.8	11.6	380	10.1	0.4	11.8	359	10.7
Protein (12% moisture)	U.S. No. 1	N/A	139	9.9	8.6	11.3	156	9.7	7.7	11.4	172	10.1
	U.S. No. 2	N/A	218	9.8	8.7	10.8	224	9.9	0.4	11.2	187	10.5
	All lots	N/A	357	9.8	8.6	11.3	380	9.8	0.4	11.4	359	10.4

N/A=Does not apply.

--=No lots reported in this category.

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

U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR DOCKAGE – ALL GRADES
SWH



U.S. WHEAT EXPORTED, 2002
DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES
SWH

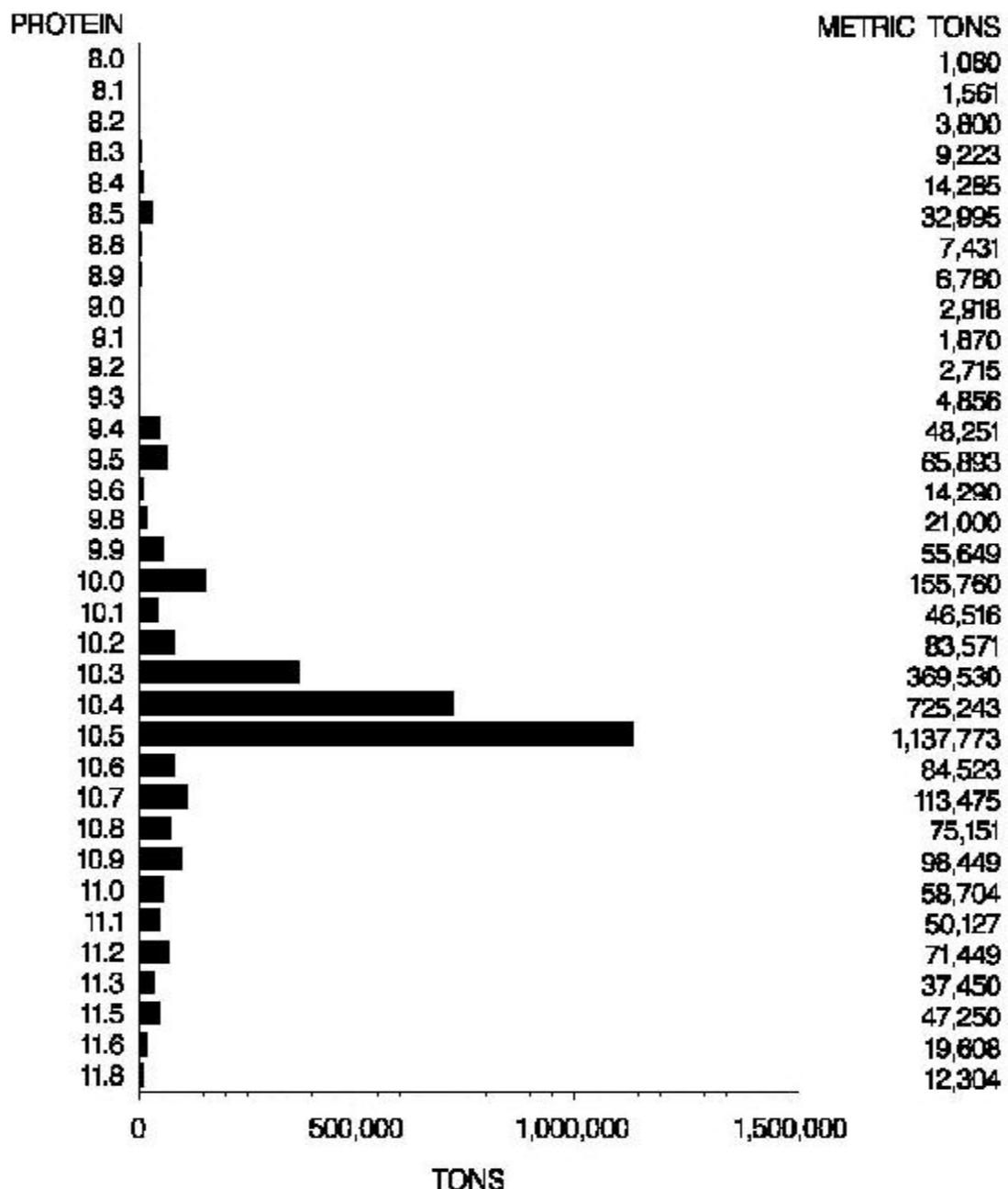


Table 7. Summary of export Hard White wheat quality, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.		
Test Weight (lb/bu)	U.S. No. 2	58.0	3	62.5	60.5	63.3	4	61.7	60.4	62.6	5	62.1	59.6	63.0
	All lots	N/A	3	62.5	60.5	63.3	4	61.7	60.4	62.6	5	62.1	59.6	63.0
Test Weight (kg/hl)	U.S. No. 2	N/A	3	82.1	79.6	83.2	4	81.1	79.5	82.3	5	81.6	78.4	82.8
	All lots	N/A	3	82.1	79.6	83.2	4	81.1	79.5	82.3	5	81.6	78.4	82.8
Moisture	U.S. No. 2	N/A	3	10.3	9.8	10.6	4	11.0	9.5	11.8	5	9.6	8.3	10.1
	All lots	N/A	3	10.3	9.8	10.6	4	11.0	9.5	11.8	5	9.6	8.3	10.1
Heat-damaged Kernels	U.S. No. 2	0.2	3	0.0	0.0	0.0	4	0.0	0.0	0.0	5	0.0	0.0	0.0
	All lots	N/A	3	0.0	0.0	0.0	4	0.0	0.0	0.0	5	0.0	0.0	0.0
Damaged Kernels (Total)	U.S. No. 2	4.0	3	0.6	0.2	0.8	4	0.3	0.0	0.5	5	0.2	0.0	0.5
	All lots	N/A	3	0.6	0.2	0.8	4	0.3	0.0	0.5	5	0.2	0.0	0.5
Foreign Material	U.S. No. 2	0.7	3	0.1	0.0	0.2	4	0.1	0.0	0.1	5	0.1	0.1	0.1
	All lots	N/A	3	0.1	0.0	0.2	4	0.1	0.0	0.1	5	0.1	0.1	0.1
Shrunken and Broken	U.S. No. 2	5.0	3	1.5	1.3	1.7	4	1.8	1.4	2.9	5	1.7	0.9	3.7
	All lots	N/A	3	1.5	1.3	1.7	4	1.8	1.4	2.9	5	1.7	0.9	3.7
Total Defects	U.S. No. 2	5.0	3	2.2	1.9	2.3	4	2.1	1.7	3.0	5	2.0	1.0	3.8
	All lots	N/A	3	2.2	1.9	2.3	4	2.1	1.7	3.0	5	2.0	1.0	3.8
Dockage	U.S. No. 2	N/A	3	0.6	0.4	0.8	4	0.5	0.3	0.8	5	0.5	0.2	0.7
	All lots	N/A	3	0.6	0.4	0.8	4	0.5	0.3	0.8	5	0.5	0.2	0.7
Wheat of other Classes	U.S. No. 2	5.0	3	0.4	0.3	0.4	4	0.7	0.2	1.8	5	0.6	0.0	1.5
	All lots	N/A	3	0.4	0.3	0.4	4	0.7	0.2	1.8	5	0.6	0.0	1.5
Contrasting Classes	U.S. No. 2	2.0	3	0.3	0.1	0.4	4	0.6	0.2	0.7	5	0.6	0.0	1.5
	All lots	N/A	3	0.3	0.1	0.4	4	0.6	0.2	0.7	5	0.6	0.0	1.5
Protein (as is basis)	U.S. No. 1	N/A	3	12.5	12.1	13.8	3	12.8	12.6	13.2	5	13.3	11.7	15.3
	All lots	N/A	3	12.5	12.1	13.8	3	12.8	12.6	13.2	5	13.3	11.7	15.3
Protein (12% moisture)	U.S. No. 1	N/A	3	12.3	11.9	13.5	3	12.7	12.6	12.8	5	12.9	11.2	14.9
	All lots	N/A	3	12.3	11.9	13.5	3	12.7	12.6	12.8	5	12.9	11.2	14.9

N/A = Does not apply.

-- = No lots reported in this category.

Table 8. Summary of export Mixed wheat quality, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002		
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots
Test Weight (lb/bu)	U.S. No. 2	58.0	--	--	--	--	--	--	--	--	2
	All lots	N/A	--	--	--	--	--	--	--	--	2
Test Weight (kg/hl)	U.S. No. 2	N/A	--	--	--	--	--	--	--	--	2
	All lots	N/A	--	--	--	--	--	--	--	--	2
Moisture	U.S. No. 2	N/A	--	--	--	--	--	--	--	--	2
	All lots	N/A	--	--	--	--	--	--	--	--	2
Heat-damaged Kernels	U.S. No. 2	0.2	--	--	--	--	--	--	--	--	2
	All lots	N/A	--	--	--	--	--	--	--	--	2
Damaged Kernels (Total)	U.S. No. 2	4.0	--	--	--	--	--	--	--	--	2
	All lots	N/A	--	--	--	--	--	--	--	--	2
Foreign Material	U.S. No. 2	0.7	3	0.2	0.1	0.2	--	--	--	--	2
	All lots	N/A	3	0.2	0.1	0.2	--	--	--	--	2
Shrunken and Broken	U.S. No. 2	5.0	3	1.2	1.0	1.2	--	--	--	--	2
	All lots	N/A	3	1.2	1.0	1.2	--	--	--	--	2
Total Defects	U.S. No. 2	5.0	3	2.3	2.3	2.7	--	--	--	--	2
	All lots	N/A	3	2.3	2.3	2.7	--	--	--	--	2
Dockage	U.S. No. 2	N/A	3	0.8	0.6	1.1	--	--	--	--	2
	All lots	N/A	3	0.8	0.6	1.1	--	--	--	--	2
Protein (as is basis)	U.S. No. 2	N/A	--	--	--	--	--	--	--	--	2
	All lots	N/A	--	--	--	--	--	--	--	--	2
Protein (12% moisture)	U.S. No. 2	N/A	--	--	--	--	--	--	--	--	2
	All lots	N/A	--	--	--	--	--	--	--	--	2

-- = 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 9. U.S. Corn Exports: Number of lots and quantity exported by class and grade, 2000-2002

Class	Grade	2000		2001		2002	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Yellow Corn	U.S. No. 1	124	992,877	145	1,183,954	164	1,366,659
	U.S. No. 2	1,333	27,667,153	1,322	26,570,531	1,173	23,681,848
	U.S. No. 3	575	15,737,011	529	14,926,357	625	16,608,380
	U.S. No. 4	1	1,193	4	11,968	4	6,289
	U.S. No. 5	--	--	1	1,031	--	--
	U.S. Sample						
	Grade	2	3,734	--	--	5	6,137
	Not inspected	1	2,304	1	9,367	1	4,145
	All lots	2,036	44,414,272	2,002	42,703,208	1,972	41,673,458
White Corn	U.S. No. 1	55	477,726	32	338,769	53	716,096
	U.S. No. 2	49	740,997	54	743,017	48	560,333
	U.S. No. 3	1	2,560	--	--	3	8,164
	U.S. No. 5	--	--	1	1,286	--	--
	All lots	105	1,221,283	87	1,083,072	104	1,284,593
All Classes	U.S. No. 1	179	1,470,603	177	1,522,723	217	2,082,755
	U.S. No. 2	1,382	28,418,150	1,376	27,313,548	1,221	24,242,181
	U.S. No. 3	576	15,739,571	529	14,926,357	628	16,616,544
	U.S. No. 4	1	1,193	4	11,968	4	6,289
	U.S. No. 5	--	--	2	2,317	--	--
	U.S. Sample						
	Grade	2	3,734	--	--	5	6,137
	Not inspected	1	2,304	1	9,367	1	4,145
	All lots	2,141	45,635,555	2,089	43,786,280	2,076	42,958,051

-- = No lots reported in this category.

Not inspected = These lots were sold without grade designation.

Table 10. Summary of export Yellow corn quality, 2000-2002

Factor	Grade	Grade Limit	2000				2001				2002			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Test Weight (lb/bu)	U.S. No. 1	56.0	124	58.2	56.3	60.7	145	58.2	56.4	60.1	164	58.6	56.1	69.2
	U.S. No. 2	54.0	1,332	57.3	54.0	61.0	1,322	57.1	54.0	60.0	1,173	57.2	54.1	60.4
	U.S. No. 3	52.0	575	57.5	53.1	60.9	529	57.3	52.0	60.6	625	57.4	52.2	60.4
	U.S. No. 4	49.0	1	51.9	51.9	51.9	4	55.9	51.6	59.7	4	51.4	49.7	58.4
	U.S. No. 5	46.0	--	--	--	--	1	57.3	57.3	57.3	--	--	--	--
	U.S. Sample													
	Grade	N/A	2	51.3	51.2	51.5	--	--	--	--	5	55.8	55.0	60.2
	All lots	N/A	2,034	57.4	51.2	61.0	2,001	57.2	51.6	60.6	1,971	57.3	49.7	69.2
Test Weight (kg/hl)	U.S. No. 1	N/A	124	74.9	72.5	78.1	145	74.9	72.6	77.4	164	75.5	72.2	89.1
	U.S. No. 2	N/A	1,332	73.8	69.5	78.5	1,322	73.5	69.5	77.2	1,173	73.7	69.7	77.7
	U.S. No. 3	N/A	575	74.0	68.4	78.3	529	73.7	66.9	78.0	625	73.8	67.2	77.7
	U.S. No. 4	N/A	1	66.8	66.8	66.8	4	71.9	66.4	76.8	4	66.1	64.0	75.2
	U.S. No. 5	N/A	--	--	--	--	1	73.8	73.8	73.8	--	--	--	--
	U.S. Sample													
	Grade	N/A	2	66.1	65.9	66.3	--	--	--	--	5	71.8	70.8	77.5
	All lots	N/A	2,034	73.9	65.9	78.5	2,001	73.6	66.4	78.0	1,971	73.8	64.0	89.1
Moisture	U.S. No. 1	N/A	124	14.1	12.6	14.9	145	14.1	13.4	14.8	164	14.4	12.9	14.9
	U.S. No. 2	N/A	1,329	14.0	9.4	15.0	1,322	14.1	12.2	15.0	1,173	14.2	12.3	15.0
	U.S. No. 3	N/A	574	14.1	12.7	15.3	529	14.3	13.1	15.4	625	14.3	4.2	15.3
	U.S. No. 4	N/A	1	13.4	13.4	13.4	4	14.0	13.4	14.7	4	14.2	13.7	14.4
	U.S. No. 5	N/A	--	--	--	--	1	14.8	14.8	14.8	--	--	--	--
	U.S. Sample													
	Grade	N/A	2	13.7	13.5	13.8	--	--	--	--	5	14.0	13.2	14.7
	All lots	N/A	2,030	14.0	9.4	15.3	2,001	14.1	12.2	15.4	1,971	14.3	4.2	15.3
Heat-damaged Kernels	U.S. No. 1	0.1	124	0.0	0.0	0.0	145	0.0	0.0	0.0	164	0.0	0.0	0.0
	U.S. No. 2	0.2	1,332	0.0	0.0	0.1	1,322	0.0	0.0	0.2	1,173	0.0	0.0	0.2
	U.S. No. 3	0.5	575	0.0	0.0	0.1	529	0.0	0.0	0.2	625	0.0	0.0	0.2
	U.S. No. 4	1.0	1	0.0	0.0	0.0	4	0.0	0.0	0.0	4	0.0	0.0	0.0
	U.S. No. 5	3.0	--	--	--	--	1	0.0	0.0	0.0	--	--	--	--
	U.S. Sample													
	Grade	N/A	2	0.0	0.0	0.0	--	--	--	--	5	0.0	0.0	0.0
	All lots	N/A	2,034	0.0	0.0	0.1	2,001	0.0	0.0	0.2	1,971	0.0	0.0	0.2
Damaged Kernels (Total)	U.S. No. 1	3.0	124	1.4	0.2	2.7	145	1.8	0.4	3.0	164	1.8	0.3	3.0
	U.S. No. 2	5.0	1,332	2.1	0.3	4.9	1,322	3.0	0.0	5.0	1,173	3.1	0.0	5.0
	U.S. No. 3	7.0	575	2.0	0.0	5.3	529	3.5	0.0	6.8	625	3.6	0.0	6.8
	U.S. No. 4	10.0	1	1.0	1.0	1.0	4	3.6	2.1	5.3	4	4.4	3.0	6.5
	U.S. No. 5	15.0	--	--	--	--	1	0.9	0.9	0.9	--	--	--	--
	U.S. Sample													
	Grade	N/A	2	1.2	1.0	1.3	--	--	--	--	5	4.7	1.1	6.0
	All lots	N/A	2,034	2.0	0.0	5.3	2,001	3.1	0.0	6.8	1,971	3.3	0.0	6.8

continued

Table 10. Summary of export Yellow corn quality, 2000-2002--Continued

Factor	Grade	Grade Limit	2000				2001				2002			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots	
			U.S. No. 1	2.0				U.S. No. 1	2.0				U.S. No. 1	2.0
Broken Corn and Foreign Material	U.S. No. 1	2.0	124	1.6	0.8	2.0	145	1.6	0.6	2.0	163	1.6	0.7	2.0
	U.S. No. 2	3.0	1,329	2.7	0.7	3.0	1,319	2.6	0.7	3.0	1,170	2.7	0.7	3.0
	U.S. No. 3	4.0	575	3.3	0.8	4.0	529	2.9	0.7	4.0	625	3.3	0.9	4.0
	U.S. No. 4	5.0	1	1.6	1.6	1.6	4	3.2	1.7	4.9	4	2.5	1.9	4.4
	U.S. No. 5	7.0	--	--	--	--	1	5.3	5.3	5.3	--	--	--	--
	U.S. Sample													
	Grade	N/A	2	1.8	1.6	1.9	--	--	--	--	5	2.0	1.9	7.0
	All lots	N/A	2,031	2.9	0.7	4.0	1,998	2.7	0.6	5.3	1,967	2.9	0.7	7.0
Broken Corn	U.S. No. 1	N/A	7	1.1	0.9	1.3	4	1.1	0.9	1.4	5	1.2	1.0	1.4
	U.S. No. 2	N/A	168	2.0	0.7	2.4	150	1.9	0.8	2.3	145	2.0	0.7	2.4
	U.S. No. 3	N/A	122	2.2	0.1	2.9	70	2.3	0.6	3.0	34	2.7	1.0	3.1
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample													
	Grade	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	297	2.1	0.1	2.9	224	2.1	0.6	3.0	184	2.2	0.7	3.1
Foreign Material	U.S. No. 1	N/A	7	0.3	0.3	0.4	4	0.3	0.2	0.5	5	0.5	0.4	0.7
	U.S. No. 2	N/A	166	0.7	0.3	1.8	150	0.7	0.2	2.0	144	0.7	0.2	1.0
	U.S. No. 3	N/A	122	0.8	0.1	2.5	70	0.8	0.4	1.6	34	0.8	0.3	1.0
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample													
	Grade	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	295	0.7	0.1	2.5	224	0.7	0.2	2.0	183	0.7	0.2	1.0

N/A = Does not apply.

-- = No lots reported in this category.

Table 11. Summary of export White corn quality, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002					
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High		
			No. of Lots	Avg.				No. of Lots	Avg.					
Test Weight (lb/bu)	U.S. No. 1	56.0	55	59.5	56.3	62.0	32	59.2	56.5	60.3	53	59.8	57.8	60.9
	U.S. No. 2	54.0	49	59.7	58.2	61.0	54	59.4	55.8	60.3	48	59.6	57.9	60.6
	U.S. No. 3	52.0	1	57.9	57.9	57.9	--	--	--	--	3	58.6	56.7	59.4
	U.S. No. 5	46.0	--	--	--	--	1	47.7	47.7	47.7	--	--	--	--
	All lots	N/A	105	59.6	56.3	62.0	87	59.3	47.7	60.3	104	59.7	56.7	60.9
Test Weight (kg/hl)	U.S. No. 1	N/A	55	76.6	72.5	79.8	32	76.3	72.7	77.6	53	76.9	74.4	78.4
	U.S. No. 2	N/A	49	76.9	74.9	78.5	54	76.4	71.8	77.6	48	76.8	74.5	78.0
	U.S. No. 3	N/A	1	74.6	74.6	74.6	--	--	--	--	3	75.4	73.0	76.5
	U.S. No. 5	N/A	--	--	--	--	1	61.4	61.4	61.4	--	--	--	--
	All lots	N/A	105	76.8	72.5	79.8	87	76.4	61.4	77.6	104	76.9	73.0	78.4
Moisture	U.S. No 1	N/A	54	13.5	12.8	14.4	32	13.9	12.9	14.6	53	14.0	13.6	14.8
	U.S. No. 2	N/A	49	13.6	12.9	14.5	54	14.0	12.5	14.8	48	14.0	13.2	14.5
	U.S. No. 3	N/A	1	13.1	13.1	13.1	--	--	--	--	3	13.7	12.6	13.9
	U.S. No. 5	N/A	--	--	--	--	1	14.1	14.1	14.1	--	--	--	--
	All lots	N/A	104	13.5	12.8	14.5	87	14.0	12.5	14.8	104	14.0	12.6	14.8
Heat-damaged Kernels	U.S. No. 1	0.1	55	0.0	0.0	0.0	32	0.0	0.0	0.0	53	0.0	0.0	0.0
	U.S. No. 2	0.2	49	0.0	0.0	0.0	54	0.0	0.0	0.0	48	0.0	0.0	0.0
	U.S. No. 3	0.5	1	0.0	0.0	0.0	--	--	--	--	3	0.0	0.0	0.0
	U.S. No. 5	3.0	--	--	--	--	1	0.0	0.0	0.0	--	--	--	--
	All lots	N/A	105	0.0	0.0	0.0	87	0.0	0.0	0.0	104	0.0	0.0	0.0
Damaged Kernels (Total)	U.S. No. 1	3.0	55	1.1	0.2	2.7	32	1.8	0.3	3.0	53	1.7	0.7	2.8
	U.S. No. 2	5.0	49	1.2	0.4	3.5	54	2.4	0.5	4.9	48	2.4	0.8	4.6
	U.S. No. 3	7.0	1	0.8	0.8	0.8	--	--	--	--	3	2.3	1.1	5.9
	U.S. No. 5	15.0	--	--	--	--	1	2.8	2.8	2.8	--	--	--	--
	All lots	N/A	105	1.1	0.2	3.5	87	2.2	0.3	4.9	104	2.0	0.7	5.9
Broken Corn and Foreign Material	U.S. No. 1	2.0	55	1.6	0.8	2.0	32	1.6	0.9	2.0	53	1.5	0.8	2.0
	U.S. No. 2	3.0	48	2.1	1.1	2.9	54	2.0	0.7	2.9	48	2.0	1.0	3.0
	U.S. No. 3	4.0	1	3.7	3.7	3.7	--	--	--	--	3	3.2	1.7	3.8
	U.S. No. 5	7.0	--	--	--	--	1	3.5	3.5	3.5	--	--	--	--
	All lots	N/A	104	1.9	0.8	3.7	87	1.9	0.7	3.5	104	1.7	0.8	3.8

continued

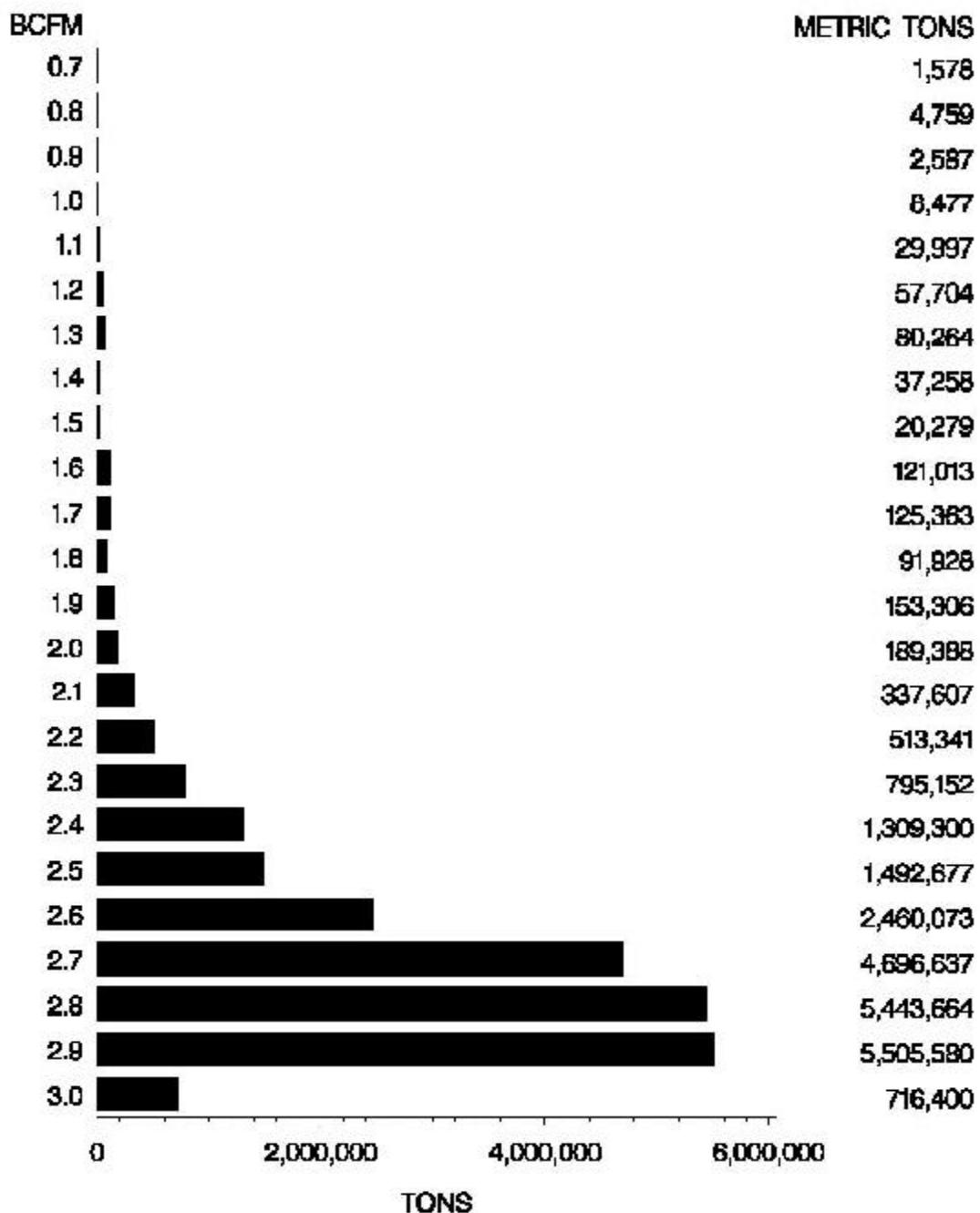
Table 11. Summary of export White corn quality, 2000-2002--Continued

Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.
Broken Corn	U.S. No. 1	N/A	12	1.2	1.0	1.4	4	1.1	0.8	1.4	9	1.3
	U.S. No. 2	N/A	1	1.5	1.5	1.5	1	1.6	1.6	1.6	--	--
	U.S. No. 3	N/A	1	2.8	2.8	2.8	--	--	--	--	--	--
	All lots	N/A	14	1.3	1.0	2.8	5	1.1	0.8	1.6	9	1.3
Foreign Material	U.S. No. 1	N/A	12	0.4	0.3	0.5	4	0.4	0.2	0.5	9	0.4
	U.S. No. 2	N/A	1	0.5	0.5	0.5	1	0.5	0.5	0.5	--	--
	U.S. No. 3	N/A	1	0.9	0.9	0.9	--	--	--	--	--	--
	All lots	N/A	14	0.4	0.3	0.9	5	0.4	0.2	0.5	9	0.4

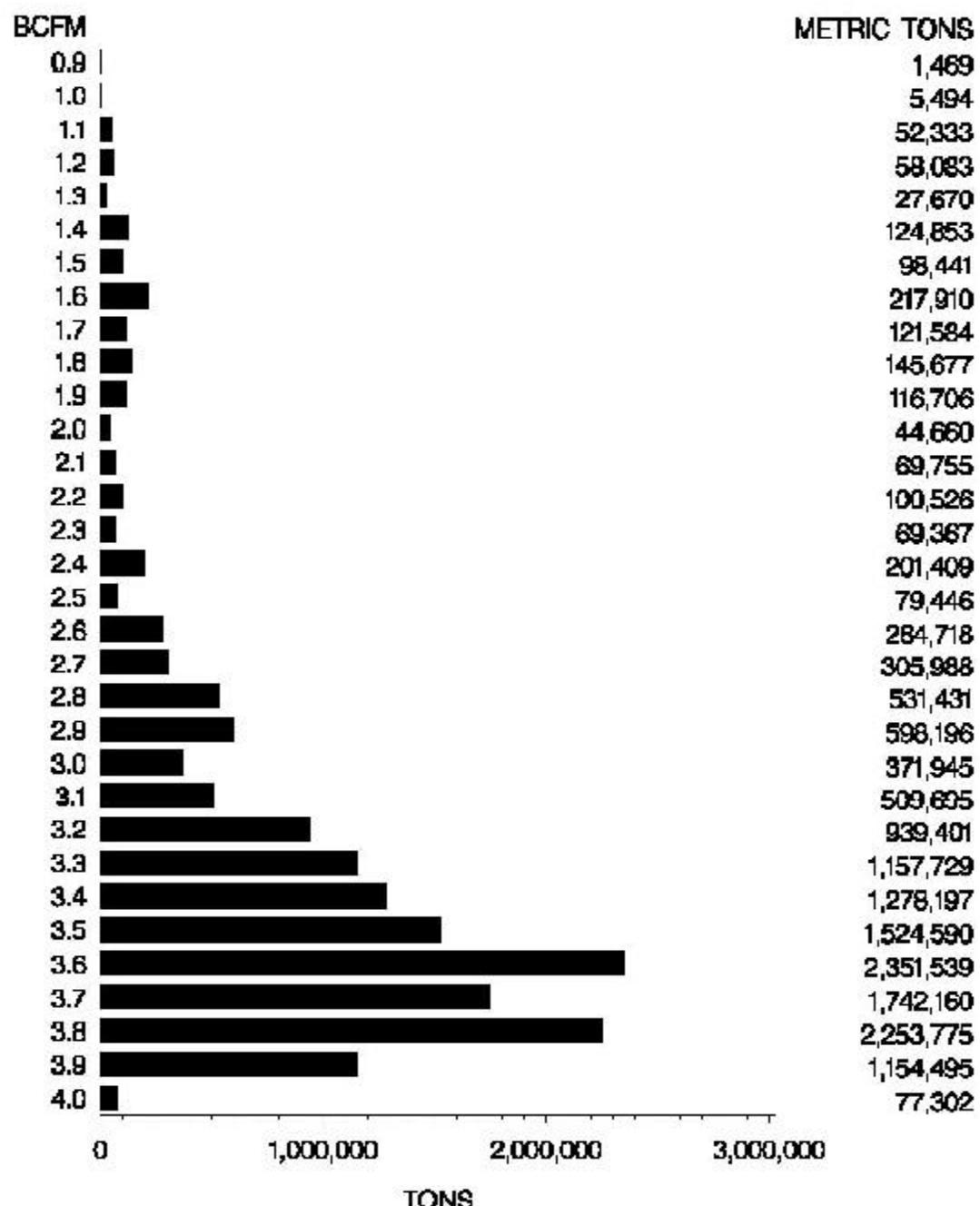
N/A=Does not apply.

--=No lots reported in this category.

U.S. CORN EXPORTED, 2002
DISTRIBUTION FOR BCFM - GRADE 2



U.S. CORN EXPORTED, 2002
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	Minimum test weight per bushel (pounds)	Maximum limits of -				
		Damaged kernels		Foreign Material (percent)	Splits (percent)	Soybeans of other colors ¹ (percent)
		Heat-damaged kernels (percent)	Total damaged kernels (percent)			
U.S. No. 1	56.0	0.2	2.0	1.0	10.0	1.0
U.S. No. 2	54.0	0.5	3.0	2.0	20.0	2.0
U.S. No. 3	52.0	1.0	5.0	3.0	30.0	5.0
U.S. No. 4	49.0	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.

¹ Does not apply to Mixed soybeans.

Soybeans

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel determined by an approved device before the removal of 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 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 12. U.S. Soybean Exports: Number of lots and quantity exported by class and grade, 2000-2002

Grade	2000		2001		2002	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	99	1,764,089	81	1,090,388	72	1,261,851
U.S. No. 2	971	23,173,532	1,018	25,197,627	1,007	24,669,378
U.S. No. 3	12	120,255	34	728,224	13	103,707
U.S. No. 4	1	2,829	--	--	2	13,474
U.S. Sample Grade	2	16,001	2	4,745	--	--
Not inspected	1	1,347	4	49,936	3	39,873
All lots	1,086	25,078,053	1,140	27,070,920	1,097	26,088,283

Not inspected = These lots were sold without grade designation.

Table 13. Summary of export Soybean quality, 2000-2002

Factor	Grade	Grade Limit	2000				2001				2002			
			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
Test Weight (lb/bu)	Grade	N/A	2	48.0	47.9	48.2	2	53.6	53.6	57.4	--	--	--	--
	All lots	N/A	1,085	55.9	47.9	58.6	1,135	55.6	53.4	58.3	1,094	55.9	53.1	58.5
	U.S. No. 1	56.0	99	56.5	56.0	58.6	81	56.4	56.0	58.1	72	56.4	56.0	58.1
	U.S. No. 2	54.0	971	55.9	54.0	58.6	1,018	55.6	54.0	58.3	1,007	55.9	54.0	58.5
	U.S. No. 3	52.0	12	55.1	53.5	56.3	34	54.7	53.4	57.4	13	56.3	54.4	57.4
	U.S. No. 4	49.0	1	55.5	55.5	55.5	--	--	--	--	2	53.1	53.1	54.5
	U.S. Sample	Grade	N/A	2	48.0	47.9	48.2	2	53.6	53.6	57.4	--	--	--
Test Weight (kg/hl)	All lots	N/A	1,085	55.9	47.9	58.6	1,135	55.6	53.4	58.3	1,094	55.9	53.1	58.5
	U.S. No. 1	N/A	99	72.7	72.1	75.4	81	72.7	72.1	74.8	72	72.6	72.1	74.8
	U.S. No. 2	N/A	971	72.0	69.5	75.4	1,018	71.6	69.5	75.1	1,007	72.0	69.6	75.3
	U.S. No. 3	N/A	12	70.9	68.8	72.5	34	70.4	68.8	73.9	13	72.4	70.0	73.8
	U.S. No. 4	N/A	1	71.5	71.5	71.5	--	--	--	--	2	68.4	68.3	70.2
	U.S. Sample	Grade	N/A	2	61.8	61.8	62.0	2	69.0	68.9	73.9	--	--	--
	All lots	N/A	1,085	92.0	61.7	75.4	1,135	71.6	68.8	75.1	1,094	72.0	68.3	75.3
Moisture	U.S. No. 1	N/A	99	11.5	10.0	12.8	81	11.8	10.6	13.0	71	12.0	10.2	13.7
	U.S. No. 2	N/A	971	11.4	9.5	34.3	1,018	11.5	9.9	13.6	1,006	12.1	9.7	14.0
	U.S. No. 3	N/A	12	10.8	9.7	12.6	32	10.5	9.4	13.3	13	11.0	10.1	12.4
	U.S. No. 4	N/A	1	11.1	11.1	11.1	--	--	--	--	2	12.5	12.5	13.1
	U.S. Sample	Grade	N/A	2	11.4	11.2	11.5	2	10.3	10.3	12.1	--	--	--
	All lots	N/A	1,085	11.4	9.5	34.3	1,135	11.5	9.4	13.6	1,092	12.1	9.7	14.0
	U.S. Sample	All lots	N/A	1,085	11.4	9.5	34.3	1,135	11.5	9.4	13.6	1,092	12.1	9.7
Heat-damaged Kernels	U.S. No. 1	0.2	99	0.0	0.0	0.1	81	0.0	0.0	0.2	72	0.0	0.0	0.1
	U.S. No. 2	0.5	971	0.1	0.0	0.5	1,018	0.1	0.0	0.4	1,007	0.1	0.0	0.5
	U.S. No. 3	1.0	12	0.0	0.0	0.1	34	0.0	0.0	0.3	13	0.0	0.0	0.2
	U.S. No. 4	3.0	1	0.0	0.0	0.0	--	--	--	--	2	0.3	0.2	1.6
	U.S. Sample	Grade	N/A	2	0.1	0.0	0.1	2	0.0	0.0	0.0	--	--	--
	All lots	N/A	1,085	0.1	0.0	0.5	1,135	0.1	0.0	0.4	1,094	0.1	0.0	1.6
	U.S. Sample	All lots	N/A	1,085	0.1	0.0	0.5	1,135	0.1	0.0	0.4	1,094	0.1	0.0
Damaged Kernels (Total)	U.S. No. 1	2.0	99	0.6	0.0	1.7	81	0.7	0.0	1.6	72	0.7	0.0	1.6
	U.S. No. 2	3.0	971	1.0	0.0	3.0	1,018	1.4	0.0	3.0	1,007	1.4	0.0	3.0
	U.S. No. 3	5.0	12	0.7	0.1	2.1	34	0.9	0.2	4.1	13	0.7	0.1	1.9
	U.S. No. 4	8.0	1	0.9	0.9	0.9	--	--	--	--	2	5.7	3.5	5.8
	U.S. Sample	Grade	N/A	2	2.2	1.8	2.7	2	0.1	0.1	0.6	--	--	--
	All lots	N/A	1,085	1.0	0.0	3.0	1,135	1.3	0.0	4.1	1,094	1.4	0.0	5.8
	U.S. Sample	All lots	N/A	1,085	1.0	0.0	3.0	1,135	1.3	0.0	4.1	1,094	1.4	0.0

continued

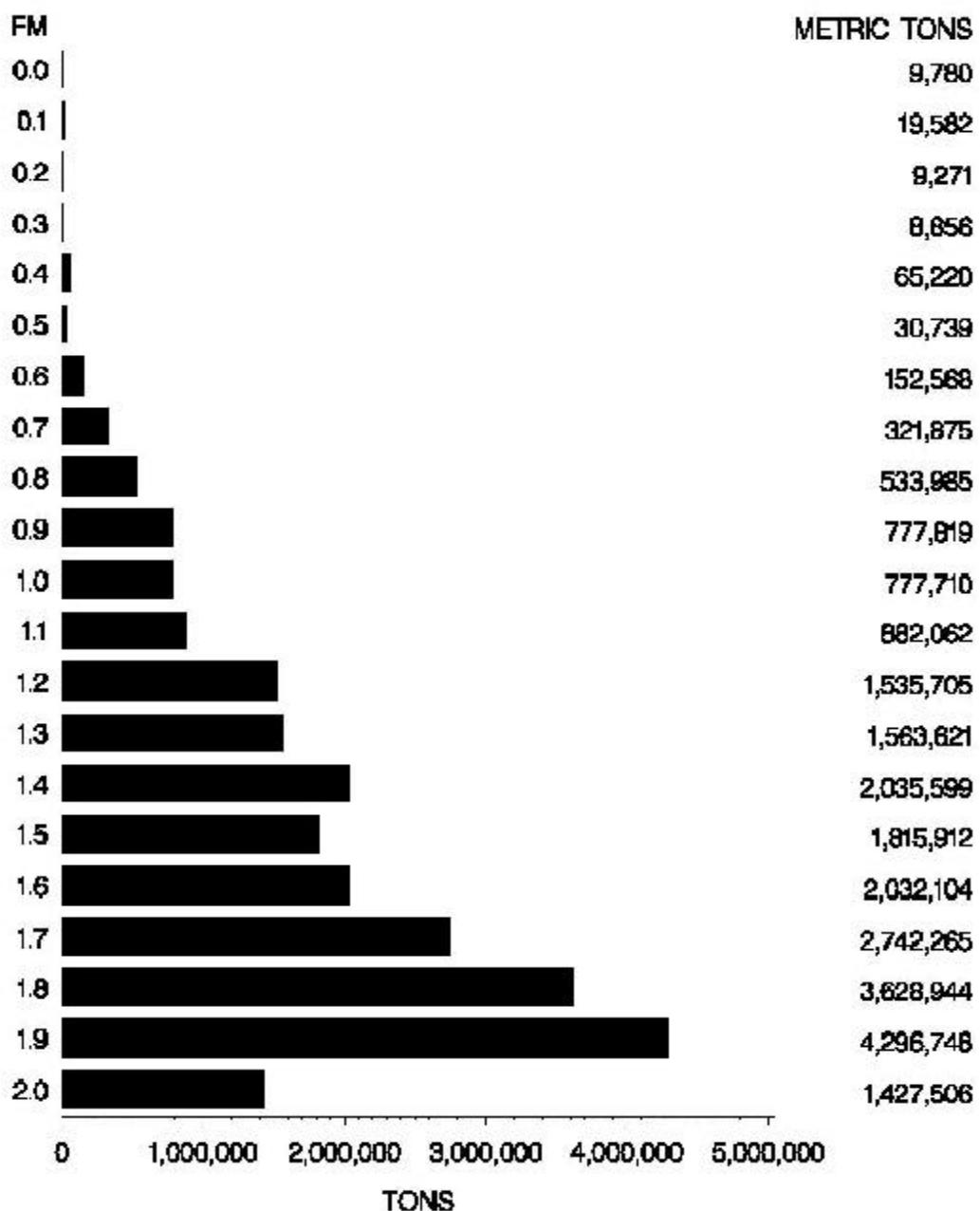
Table 13. Summary of export Soybean quality, 2000-2002-Continued

Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			No. of	Avg.				No. of	Avg.			
Foreign Material	U.S. No. 1	1.0	99	0.8	0.0	1.0	81	0.8	0.0	1.0	72	0.8
	U.S. No. 2	2.0	971	1.7	0.1	2.0	1,018	1.7	0.0	2.0	1,007	1.5
	U.S. No. 3	3.0	12	1.9	1.2	2.6	34	2.2	0.4	3.0	13	2.0
	U.S. No. 4	5.0	1	5.0	5.0	5.0	--	--	--	--	2	1.0
	U.S. Sample											
	Grade	N/A	2	13.2	2.8	23.6	2	2.6	0.5	2.6	--	--
	All lots	N/A	1,085	1.7	0.0	23.6	1,135	1.7	0.0	3.0	1,094	1.5
											0.0	2.8
Splits	U.S. No. 1	10.0	99	7.6	0.3	10.0	81	6.4	0.0	10.0	72	7.1
	U.S. No. 2	20.0	971	10.4	0.0	19.3	1,018	11.1	0.0	20.0	1,007	8.4
	U.S. No. 3	30.0	12	21.5	7.8	28.1	34	20.0	2.7	29.6	13	9.5
	U.S. No. 4	40.0	1	15.9	15.9	15.9	--	--	--	--	2	6.1
	U.S. Sample											
	Grade	N/A	2	53.4	46.8	60.0	2	40.3	3.1	40.7	--	--
	All lots	N/A	1,085	10.3	0.0	60.0	1,135	11.2	0.0	40.7	1,094	8.3
											0.0	19.7
Soybeans of Other Colors	U.S. No. 1	1.0	99	0.1	0.0	0.4	81	0.1	0.0	0.5	72	0.1
	U.S. No. 2	2.0	971	0.1	0.0	2.0	1,018	0.1	0.0	1.0	1,007	0.1
	U.S. No. 3	5.0	12	0.0	0.0	0.1	34	0.1	0.0	4.1	13	0.2
	U.S. No. 4	10.0	1	0.1	0.1	0.1	--	--	--	--	2	0.2
	U.S. Sample											
	Grade	N/A	2	0.1	0.1	0.1	2	0.0	0.0	0.0	--	--
	All lots	N/A	1,085	0.1	0.0	2.0	1,135	0.1	0.0	4.1	1,094	0.1
											0.0	3.5
Protein (adjusted to 13% moisture)	U.S. No. 1	N/A	70	34.9	33.4	39.4	70	35.7	33.1	38.6	56	35.0
	U.S. No. 2	N/A	608	35.0	32.9	39.2	577	35.8	32.6	38.7	575	35.2
	U.S. No. 3	N/A	3	34.7	34.1	36.5	8	36.0	35.5	38.2	4	34.7
	U.S. No. 4	N/A	1	34.4	34.4	34.4	--	--	--	--	--	--
	U.S. Sample											
	Grade	N/A	2	34.1	34.1	34.1	--	--	--	--	--	--
	All lots	N/A	684	35.0	32.9	39.4	655	35.8	32.6	38.7	635	35.2
											33.1	38.3
Oil (adjusted to 13% moisture)	U.S. No. 1	N/A	69	18.4	15.5	19.7	70	18.3	15.5	19.6	56	18.6
	U.S. No. 2	N/A	608	18.5	16.3	20.2	580	18.5	17.0	20.0	576	18.8
	U.S. No. 3	N/A	3	18.7	18.6	19.4	8	18.5	16.8	19.0	4	18.7
	U.S. No. 4	N/A	1	18.3	18.3	18.3	--	--	--	--	--	--
	U.S. Sample											
	Grade	N/A	2	17.8	17.3	18.3	--	--	--	--	--	--
	All lots	N/A	683	18.5	15.5	20.2	658	18.5	15.5	20.0	636	18.8
											14.5	20.0

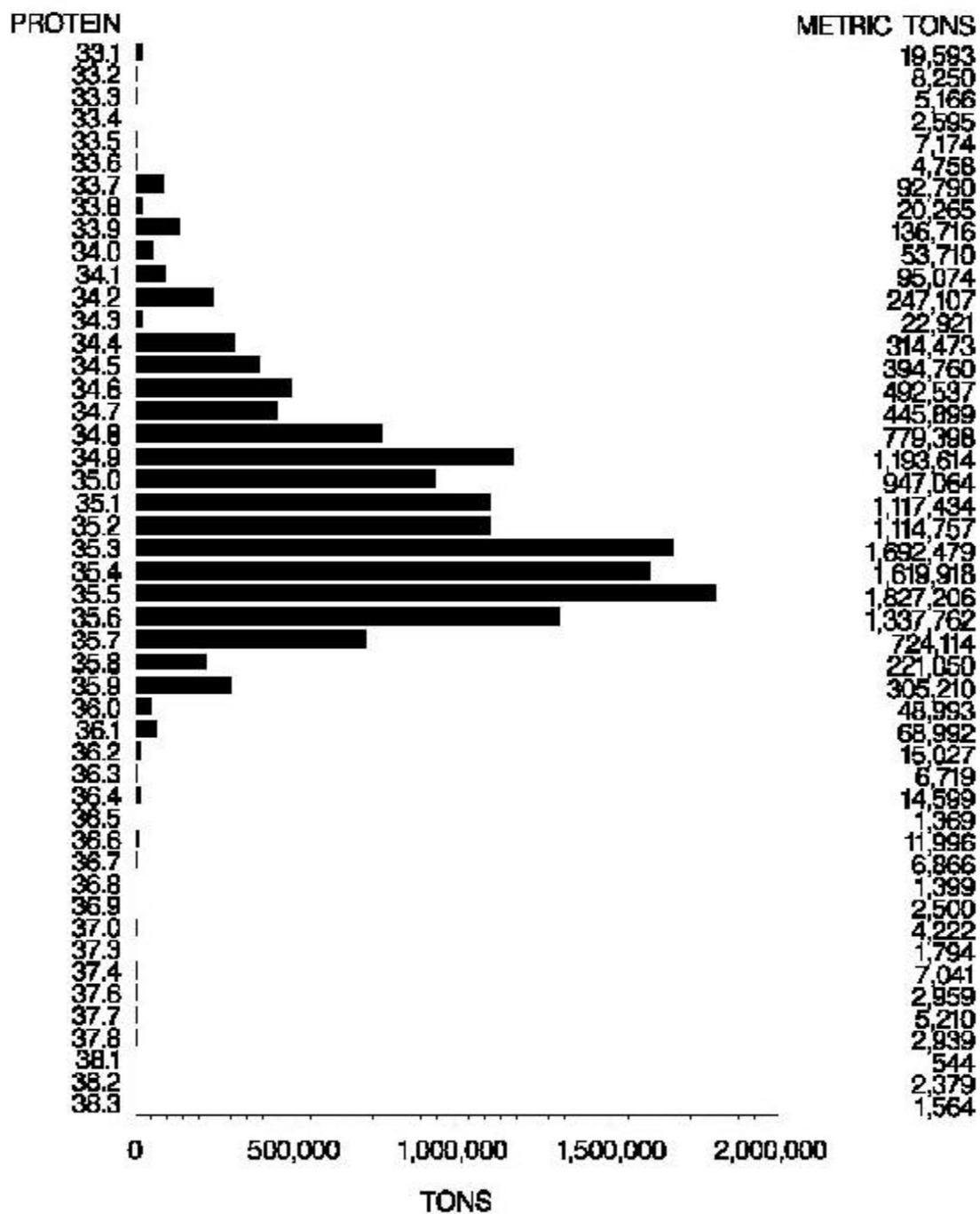
N/A = Does not apply.

-- = No lots reported in this category.

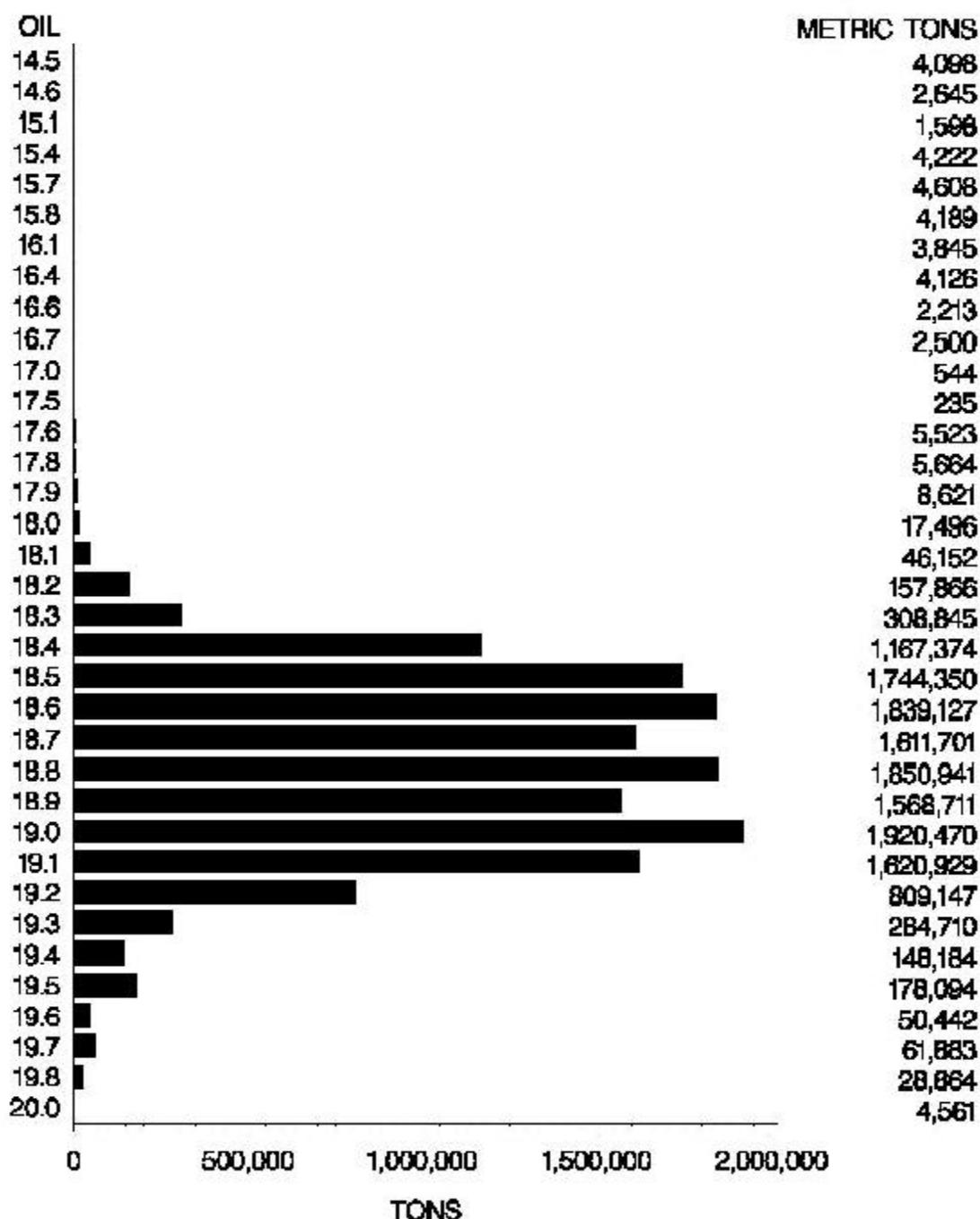
U.S. SOYBEANS EXPORTED, 2002
DISTRIBUTION FOR FM - GRADE 2



U.S. SOYBEANS EXPORTED, 2002
DISTRIBUTION FOR PROTEIN (13% M) – ALL GRADES



U.S. SOYBEANS EXPORTED, 2002
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)	Total (percent)	Foreign material
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 ¹	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.

¹ 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 14. U.S. Sorghum Exports: Number of lots and quantity exported by class and grade, 2000-2002

Class	Grade	2000		2001		2002	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Yellow Sorghum	U.S. No. 1	--	--	1	4,027	--	--
	U.S. No. 2	315	4,149,725	265	3,713,702	302	3,836,574
	U.S. No. 3	--	--	1	5,601	--	--
	All lots	315	4,149,725	267	3,723,330	302	3,836,574
All Classes	U.S. No. 1	--	--	1	4,027	--	--
	U.S. No. 2	315	4,149,725	265	3,713,702	302	3,836,574
	U.S. No. 3	--	--	1	5,601	--	--
	All lots	315	4,149,725	267	3,723,330	302	3,836,574

-- = No lots reported in this category.

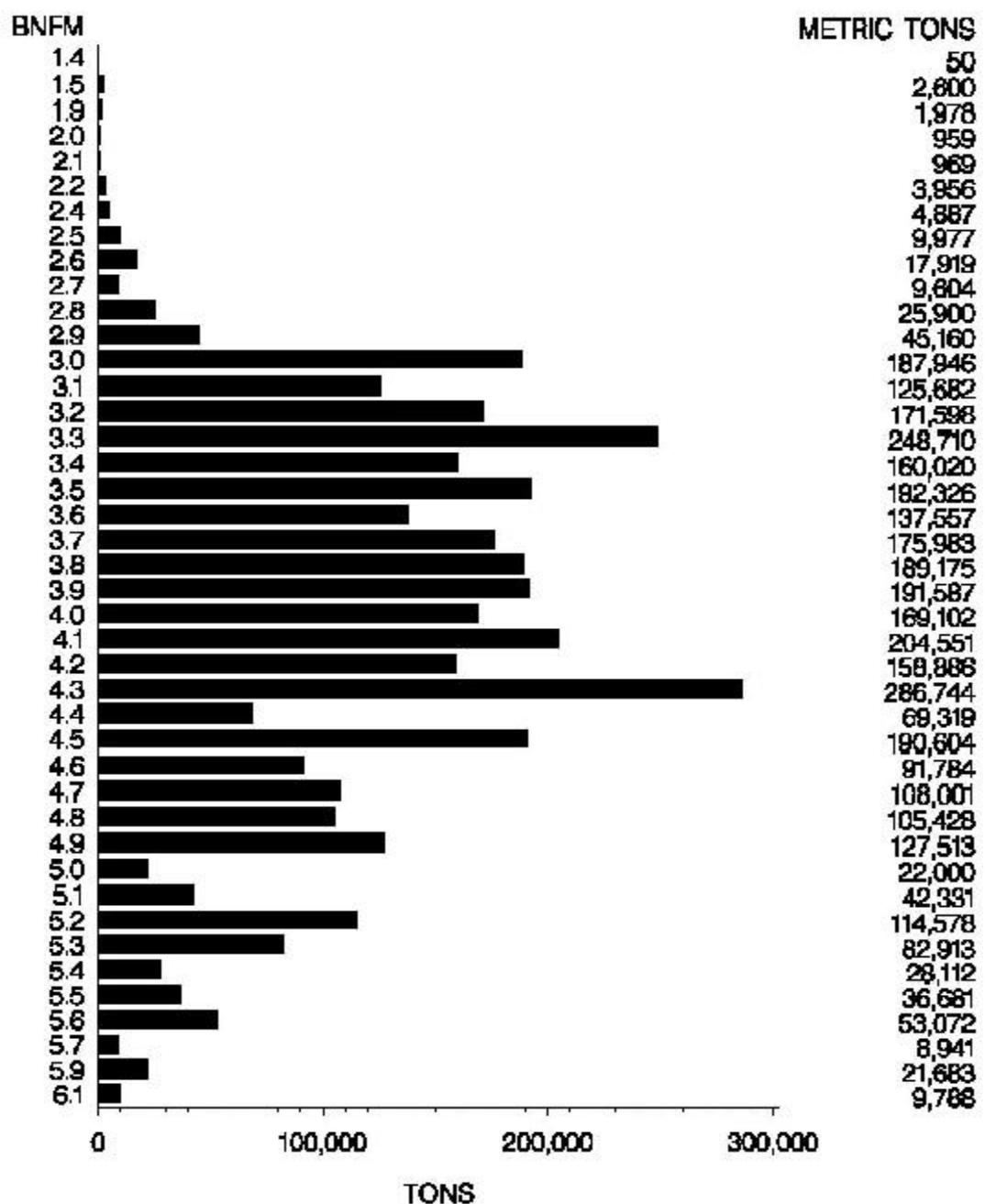
Table 15. Summary of export Sorghum quality, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			Avg.	Low				Avg.	Low			
Test Weight (lb/bu)	U.S. No. 1	57.0	--	--	--	--	--	1	57.8	57.8	57.8	--
	U.S. No. 2	55.0	314	58.4	56.5	60.7	265	58.0	55.3	60.3	302	58.1
	U.S. No. 3	53.0	--	--	--	--	1	58.7	58.7	58.7	--	--
	All lots	N/A	314	58.4	56.5	60.7	267	58.0	55.3	60.3	302	58.1
Test Weight (kg/hl)	U.S. No. 1	N/A	--	--	--	--	1	74.4	74.4	74.4	--	--
	U.S. No. 2	N/A	314	75.1	72.7	78.1	265	74.7	71.2	77.6	302	74.8
	U.S. No. 3	N/A	--	--	--	--	1	75.5	75.5	75.5	--	--
	All lots	N/A	314	75.1	72.7	78.1	267	74.7	71.2	77.6	302	74.8
Moisture	U.S. No. 1	N/A	--	--	--	--	1	13.4	13.4	13.4	--	--
	U.S. No. 2	N/A	314	13.2	12.2	14.0	265	13.2	11.3	14.0	302	13.5
	U.S. No. 3	N/A	--	--	--	--	1	12.4	12.4	12.4	--	--
	All lots	N/A	314	13.2	12.2	14.0	267	13.2	11.3	14.0	302	13.5
Heat-damaged Kernels	U.S. No. 1	0.2	--	--	--	--	1	0.0	0.0	0.0	--	--
	U.S. No. 2	0.5	314	0.0	0.0	0.2	265	0.0	0.0	0.1	302	0.0
	U.S. No. 3	1.0	--	--	--	--	1	0.0	0.0	0.0	--	--
	All lots	N/A	314	0.0	0.0	0.2	267	0.0	0.0	0.1	302	0.0
Damaged Kernels (Total)	U.S. No. 1	2.0	--	--	--	--	1	0.4	0.4	0.4	--	--
	U.S. No. 2	5.0	314	0.8	0.0	3.0	265	1.2	0.1	4.8	302	1.7
	U.S. No. 3	10.0	--	--	--	--	1	0.9	0.9	0.9	--	--
	All lots	N/A	314	0.8	0.0	3.0	267	1.2	0.1	4.8	302	1.7
Broken Kernels and Foreign Material	U.S. No. 1	4.0	--	--	--	--	1	3.8	3.8	3.8	--	--
	U.S. No. 2	7.0	314	3.8	2.3	6.0	265	4.1	2.1	6.0	302	4.0
	U.S. No. 3	10.0	--	--	--	--	1	5.6	5.6	5.6	--	--
	All lots	N/A	314	3.8	2.3	6.0	267	4.1	2.1	6.0	302	4.0
Broken Kernels	U.S. No. 1	N/A	--	--	--	--	--	--	--	--	--	--
	U.S. No. 2	N/A	62	2.5	1.6	3.2	41	2.7	1.6	3.4	27	2.3
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	62	2.5	1.6	3.2	41	2.7	1.6	3.4	27	2.3
Foreign Material	U.S. No. 1	1.5	--	--	--	--	1	0.9	0.9	0.9	--	--
	U.S. No. 2	2.5	314	1.2	0.0	2.4	265	1.1	0.0	2.3	302	1.0
	U.S. No. 3	3.5	--	--	--	--	1	3.4	3.4	3.4	--	--
	All lots	N/A	314	1.2	0.0	2.4	267	1.1	0.0	3.4	302	1.0
Dockage	U.S. No. 1	N/A	--	--	--	--	1	0.1	0.1	0.1	--	--
	U.S. No. 2	N/A	287	0.2	0.1	0.8	257	0.2	0.1	0.7	296	0.2
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	287	0.2	0.1	0.8	258	0.2	0.1	0.7	296	0.2

N/A = Does not apply.

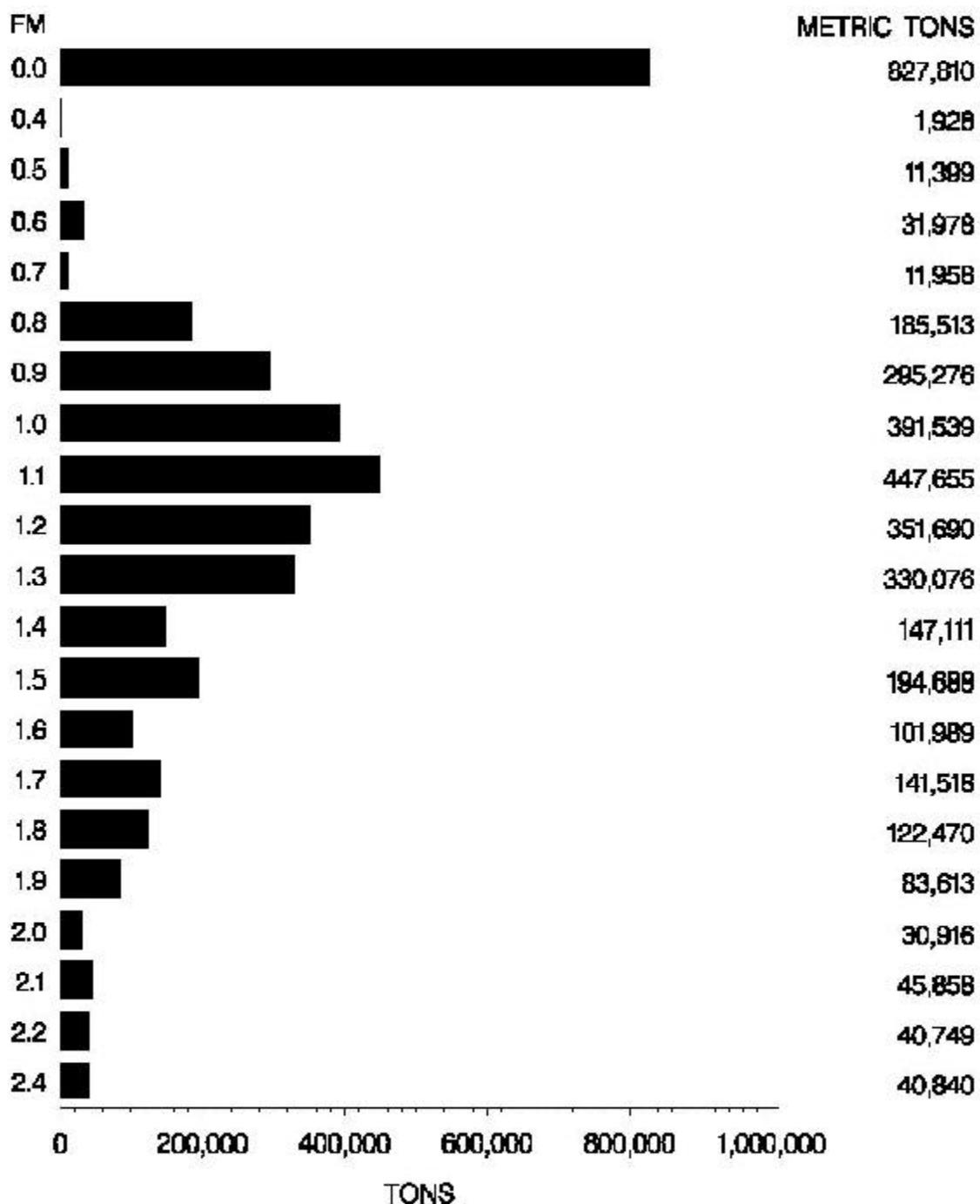
-- = No lots reported in this category.

U.S. SORGHUM EXPORTED, 2002
DISTRIBUTION FOR BNFM - GRADE 2



U.S. SORGHUM EXPORTED, 2002

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 ¹ (percent)	Damaged kernels ¹ (percent)	Foreign Material (percent)	Other grains (percent)	Skinned and broken kernels (percent)	Thin barley ² (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 ¹ (percent)	Wild Oats (percent)	Foreign Material (percent)	Skinned and broken kernels (percent)	Thin barley ² (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 ¹ (percent)	Heat-damaged kernels (percent)	Foreign Material (percent)	Broken kernels (percent)	Thin barley ² (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 16. U.S. Barley Exports: Number of lots and quantity exported by class and grade, 2000-2002

Class	Grade	2000		2001		2002	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Barley	U.S. No. 1	1	4,371	--	--	--	--
	U.S. No. 2	41	686,289	56	610,061	37	302,912
	U.S. No. 3	12	173,069	10	77,852	--	--
	U.S. No. 4	5	36,915	3	24,960	10	34,703
	All lots	59	900,644	69	712,873	47	337,615

-- = No lots reported in this category.

Table 17. Summary of export Barley quality, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			No. of Lots	Avg.				No. of Lots	Avg.			
Test Weight (lb/bu)	U.S. No. 1	47.0	1	56.5	56.5	56.5	--	--	--	--	--	--
	U.S. No. 2	45.0	41	52.2	47.5	55.7	56	51.8	46.0	55.6	37	52.6
	U.S. No. 3	43.0	12	50.9	46.9	53.3	10	49.9	46.3	52.5	--	--
	U.S. No. 4	43.0	5	53.8	52.9	55.7	3	52.9	52.3	53.1	10	54.3
	All lots	N/A	59	52.0	46.9	56.5	69	51.6	46.0	55.6	47	52.8
Test Weight (kg/hl)	U.S. No. 1	N/A	1	72.7	72.7	72.7	--	--	--	--	--	--
	U.S. No. 2	N/A	41	67.2	61.2	71.7	56	66.7	59.2	71.6	37	67.7
	U.S. No. 3	N/A	12	65.5	60.4	68.6	10	64.2	59.6	67.6	--	--
	U.S. No. 4	N/A	5	69.2	68.1	71.7	3	68.1	67.3	68.4	10	69.8
	All lots	N/A	59	67.0	60.4	72.7	69	66.5	59.2	71.6	47	67.9
Moisture	U.S. No. 1	N/A	1	11.4	11.4	11.4	--	--	--	--	--	--
	U.S. No. 2	N/A	41	11.0	9.2	13.1	56	11.0	9.8	12.9	37	10.8
	U.S. No. 3	N/A	12	11.6	10.2	13.3	10	11.6	10.6	12.7	--	--
	U.S. No. 4	N/A	5	12.9	12.0	13.3	3	12.8	12.4	13.0	10	11.7
	All lots	N/A	59	11.2	9.2	13.3	69	11.1	9.8	13.0	47	10.9
Heat-damaged Kernels	U.S. No. 1	0.2	1	0.0	0.0	0.0	--	--	--	--	--	--
	U.S. No. 2	0.3	41	0.0	0.0	0.0	56	0.0	0.0	0.0	37	0.0
	U.S. No. 3	0.5	12	0.0	0.0	0.0	10	0.0	0.0	0.0	--	--
	U.S. No. 4	1.0	5	0.0	0.0	0.0	3	0.0	0.0	0.0	10	0.0
	All lots	N/A	59	0.0	0.0	0.0	69	0.0	0.0	0.0	47	0.0
Damaged Kernels (Total)	U.S. No. 1	2.0	1	0.0	0.0	0.0	--	--	--	--	--	--
	U.S. No. 2	4.0	41	0.5	0.0	2.2	56	0.3	0.0	1.2	37	0.3
	U.S. No. 3	6.0	12	0.5	0.1	1.3	10	1.0	0.2	2.8	--	--
	U.S. No. 4	8.0	5	0.2	0.1	0.2	3	0.2	0.2	0.3	10	0.1
	All lots	N/A	59	0.5	0.0	2.2	69	0.4	0.0	2.8	47	0.3
Foreign Material	U.S. No. 1	1.0	1	0.0	0.0	0.0	--	--	--	--	--	--
	U.S. No. 2	2.0	41	0.1	0.0	0.7	56	0.1	0.0	0.3	37	0.1
	U.S. No. 3	3.0	12	0.1	0.0	0.2	10	0.1	0.0	0.3	--	--
	U.S. No. 4	4.0	5	0.0	0.0	0.1	3	0.0	0.0	0.1	10	0.0
	All lots	N/A	59	0.1	0.0	0.7	69	0.1	0.0	0.3	47	0.1
Sound Barley	U.S. No. 1	97.0	1	100	100	100	--	--	--	--	--	--
	U.S. No. 2	94.0	41	98.4	95.0	100	56	98.7	95.0	100.0	37	99.0
	U.S. No. 3	90.0	12	97.8	95.5	99.9	10	97.5	96.2	99.3	--	--
	U.S. No. 4	87.0	5	99.6	99.3	99.9	3	99.5	99.3	99.6	10	99.6
	All lots	N/A	59	98.3	95.0	100	69	98.6	95.0	100.0	47	99.1

-- = No lots reported in this category.

continued

Table 17. Summary of export Barley quality, 2000-2002 -- Continued

Factor	Grade	Grade Limit	2000			2001			2002				
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low
Thin Barley	U.S. No. 1	7.0	1	1.9	1.9	1.9	--	--	--	--	--	--	--
	U.S. No. 2	15.0	41	6.2	1.7	12.2	56	7.5	2.8	14.0	37	7.4	3.4
	U.S. No. 3	15.0	12	7.8	3.9	16.3	10	13.5	9.8	19.9	--	--	--
	U.S. No. 4	15.0	5	1.2	0.9	1.8	3	0.6	0.0	1.0	10	1.4	0.2
	All lots	N/A	59	6.3	0.9	16.3	69	7.9	0.0	19.9	47	6.8	0.2
Broken Kernels	U.S. No. 1	4.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--
	U.S. No. 2	8.0	41	0.0	0.0	0.0	56	0.0	0.0	0.0	37	0.0	0.0
	U.S. No. 3	12.0	12	0.0	0.0	0.0	10	0.0	0.0	0.0	--	--	--
	U.S. No. 4	12.0	5	0.0	0.0	0.0	3	0.0	0.0	0.0	10	0.0	0.0
	All lots	N/A	59	0.0	0.0	0.0	69	0.0	0.0	0.0	47	0.0	0.0
Dockage	U.S. No. 1	N/A	1	0.4	0.4	0.4	--	--	--	--	--	--	--
	U.S. No. 2	N/A	40	1.0	0.5	1.7	56	1.2	0.1	2.0	37	1.0	0.3
	U.S. No. 3	N/A	12	1.2	0.7	1.8	10	1.6	1.3	2.3	--	--	--
	U.S. No. 4	N/A	5	0.1	0.1	0.2	3	0.1	0.1	0.1	10	0.2	0.1
	All lots	N/A	58	1.0	0.1	1.8	69	1.2	0.1	2.3	47	0.9	0.1

N/A = Does not apply.

-- = No lots reported in this category.

Sunflower Seeds

Sunflower Seed Grades and Grade Requirements

There are no classes or subclasses in sunflower seed. Sunflower seed is divided into two U.S. numerical grades and U.S. Sample grade. One special grade is provided to emphasize a special condition affecting the value of sunflower seed and is added to and made a part of the grade designation. The special grade does not affect the numerical or Sample grade designation.

U.S. Standards for Sunflower Seeds

Grade	Minimum test weight per bushel (pounds)	Maximum limits of --		
		Damaged Sunflower Seed		Dehulled seed (percent)
		Heat damaged (percent)	Total (percent)	
U.S. No. 1	25.0	0.5	5.0	5.0
U.S. No. 2	25.0	1.0	10.0	5.0
U.S. Sample Grade				

U.S. Sample grade is sunflower seed 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 0.20 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 droppings, or equivalent quantity of other animal filth per 600 grams of sunflower seed; or
- (c) Has a musty, sour or commercially objectionable foreign odor; or
- (d) Is heating or otherwise of distinctly low quality.

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel as determined by an approved device after the removal of mechanically separated 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.

Heat-damaged sunflower seeds are seeds and pieces of sunflower seed that are materially discolored and damaged by heat.

Damaged sunflower seed is seed and pieces of sunflower seed that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, heat-damaged, mold-damaged, sprout-damaged, or otherwise materially damaged.

Dehulled seed is sunflower seed that has the hull completely removed from the sunflower kernel.

Foreign material is all matter other than whole sunflower seeds containing kernels that can be removed from the original sample by use of an approved device and by handpicking a portion of the sample.

Admixture consists of all material other than sunflower seed which can be removed from a test portion by handsieving and handpicking. Empty hulls and parts of seed are considered sunflower seed.

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.

Table 18. U.S. Sunflower Seed Exports: Number of lots and quantity exported by class and grade, 2000-2002

	2000		2001		2002	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	--	--	3	43,405	--	--
All lots	--	--	3	43,405	--	--

--=No lots reported in this category.

Table 19. Summary of export Sunflower Seed quality, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.
Test Weight (lb/bu)	U.S. No. 1	25.0	--	--	--	--	3	30.2	29.6	30.9	--	--
	All lots	N/A	--	--	--	--	3	30.2	29.6	30.9	--	--
Test Weight (kg/hl)	U.S. No. 1	N/A	--	--	--	--	3	38.9	38.1	39.8	--	--
	All lots	N/A	--	--	--	--	3	38.9	38.1	39.8	--	--
Moisture	U.S. No. 1	N/A	--	--	--	--	3	8.6	8.2	8.9	--	--
	All lots	N/A	--	--	--	--	3	8.6	8.2	8.9	--	--
Heat-damaged Sunflower Seed	U.S. No. 1	0.5	--	--	--	--	3	0.1	0.0	0.2	--	--
	All lots	N/A	--	--	--	--	3	0.1	0.0	0.2	--	--
Damaged Sunflower Seed (Total)	U.S. No. 1	5.0	--	--	--	--	3	0.8	0.3	1.7	--	--
	All lots	N/A	--	--	--	--	3	0.8	0.3	1.7	--	--
Dockage	U.S. No. 1	N/A	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	--	--	--	--	--	--	--	--	--	--
Dehulled Seed	U.S. No. 1	5.0	--	--	--	--	3	1.7	0.0	4.5	--	--
	All lots	N/A	--	--	--	--	3	1.7	0.0	4.5	--	--
Admixture	U.S. No. 1	N/A	--	--	--	--	3	1.5	0.0	4.6	--	--
	All lots	N/A	--	--	--	--	3	1.5	0.0	4.6	--	--

N/A=Does not apply.

--=No lots reported in this category.

Canola

Canola Grades and Grade Requirements

There are no classes of canola. Canola is divided into three numerical grades and U.S. Sample grade. Special grades are provided to emphasize special qualities or conditions

affecting the value, and are added to and made a part of the grade designation. They do not affect the numerical or sample grade designation.

U.S. Standards for Canola

Grade	Maximum percent limits of --								Maximum count limits of --		
	Damaged Kernels			Conspicuous Admixture				Inconspicuous Admixture	Other material		
	Heat damaged (percent)	Distinctly green (percent)	Total (percent)	Ergot (percent)	Sclerotinia (percent)	Stones (percent)	Total (percent)		Animal Filth	Glass	Unknown Foreign Substance
U.S. No. 1	0.1	2.0	3.0	0.05	0.05	0.05	1.0	5.0	3	0	1
U.S. No. 2	0.5	6.0	10.0	0.05	0.10	0.05	1.5	5.0	3	0	1
U.S. No. 3	2.0	20.0	20.0	0.05	0.15	0.05	2.0	5.0	3	0	1
U.S. Sample Grade											

U.S. Sample grade is canola that:

- (a) Does not meet the requirements for U.S. Nos. 1, 2, or 3; or
- (b) Has a musty, sour, or commercially objectionable foreign odor; or
- (c) Is heating or otherwise of distinctly low quality.

Canola

Definitions

Conspicuous admixture is all matter other than canola including, but not limited to, ergot, sclerotinia, and stones, which is conspicuous and readily distinguishable from canola and which remains in the sample after the removal of machine separated dockage. Conspicuous admixture is added to machine separated dockage in the computation of total dockage.

Damaged kernels are canola and pieces of canola that are heat-damaged, sprout-damaged, mold-damaged, distinctly green-damaged, frost-damaged, rime-damaged, or otherwise materially damaged.

Distinctly green kernels are canola and pieces of canola which, after being crushed, exhibit a distinctly green color.

Dockage is all matter other than canola that can be removed from the original sample by use of an approved device according to procedures described in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of canola kernels that cannot be recovered by properly screening or recleaning. Machine separated dockage is added to conspicuous admixture in the computation of total dockage.

Ergot is sclerotia of the fungus, *Claviceps* species, which are associated with some seeds other than canola where the fungal organism has replaced the seed.

Heat-damaged kernels are canola and pieces of canola which, after being crushed, exhibit that they are discolored and damaged by heat.

Inconspicuous admixture is any seed which is difficult to distinguish from canola. This includes, but is not limited to, common wild mustard (*Brassica kaber* and *B. juncea*), domestic brown mustard (*Brassica juncea*), yellow mustard (*B. hirta*), and seed other than the mustard group.

Sclerotia are dark colored or black resting bodies of the *Sclerotinia* and *Claviceps*.

Sclerotinia is the genus name which includes the fungus *Sclerotinia sclerotiorum* which produces sclerotia. Canola is only infrequently infected, and the sclerotia, unlike sclerotia of ergot, are usually associated with the stem of the plants.

Table 20. U.S. Canola Exports: Number of lots and quantity exported by class and grade, 2000-2002

	2000		2001		2002	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	3	43,696	1	19,155	--	--
U.S. No. 3	1	19,603	--	--	--	--
All lots	0 4	63,299	1	19,155	--	--

-- = No lots reported in this category.

Table 21. Summary of export Canola quality, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			No. of Lots	Avg.				No. of Lots	Avg.			
Dockage	U.S. No. 1	N/A	3	5.0	4.1	5.2	1	4.8	4.8	4.8	--	--
	U.S. No. 3	N/A	1	4.5	4.5	4.5	--	--	--	--	--	--
	All lots	N/A	4	4.9	4.1	5.2	1	4.8	4.8	4.8	--	--
Moisture	U.S. No. 1	N/A	3	7.5	7.4	7.8	1	7.1	7.1	7.1	--	--
	U.S. No. 3	N/A	1	7.9	7.9	7.9	--	--	--	--	--	--
	All lots	N/A	4	7.6	7.1	7.9	1	7.1	7.1	7.1	--	--
Heat damaged Kernels	U.S. No. 1	0.1	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
	U.S. No. 3	2.0	1	0.0	0.0	0.0	--	--	--	--	--	--
	All lots	N/A	4	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
Distinctly green kernels	U.S. No. 1	2.0	3	0.6	0.5	0.6	1	1.0	1.0	1.0	--	--
	U.S. No. 3	20.0	1	0.4	0.4	0.4	--	--	--	--	--	--
	All lots	N/A	4	0.5	0.4	0.6	1	1.0	1.0	1.0	--	--
Total damaged kernels	U.S. No. 1	3.0	3	0.8	0.7	0.8	1	1.3	1.3	1.3	--	--
	U.S. No. 3	20.0	1	0.5	0.5	0.5	--	--	--	--	--	--
	All lots	N/A	4	0.7	0.5	0.8	1	1.3	1.3	1.3	--	--
Ergot	U.S. No. 1	0.05	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
	U.S. No. 3	0.05	1	0.0	0.0	0.0	--	--	--	--	--	--
	All lots	N/A	4	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
Sclerotinia	U.S. No. 1	0.05	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
	U.S. No. 3	0.15	1	0.0	0.0	0.0	--	--	--	--	--	--
	All lots	N/A	4	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
Stones	U.S. No. 1	0.05	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
	U.S. No. 3	0.05	1	0.0	0.0	0.0	--	--	--	--	--	--
	All lots	N/A	4	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
Total conspicuous admixture	U.S. No. 1	1.0	3	0.5	0.3	0.5	1	0.5	0.5	0.5	--	--
	U.S. No. 3	2.0	1	0.5	0.5	0.5	--	--	--	--	--	--
	All lots	N/A	4	0.5	0.3	0.2	1	0.5	0.5	0.5	--	--
Inconspicuous admixture	U.S. No. 1	5.0	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--
	U.S. No. 3	5.0	1	0.1	0.1	0.1	--	--	--	--	--	--
	All lots	N/A	4	0.0	0.0	0.1	1	0.0	0.0	0.0	--	--

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 ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, 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 22. U.S. Flaxseed Exports: Number of lots and quantity exported by class and grade, 2000-2002

	2000		2001		2002	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	2	15,303	4	56,728	6	69,737
All lots	2	15,303	4	56,728	6	69,737

-- =No lots reported in this category.

Table 23. Summary of export Flaxseed quality, 2000-2002

Factor	Grade	Grade Limit	2000			2001			2002			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.
Test Weight (lb/bu)	U.S. No. 1	49.0	2	49.2	49.1	49.6	4	50.2	50.0	50.4	6	49.8
	All lots	N/A	2	49.2	49.1	49.6	4	50.2	50.0	50.4	6	49.8
Test Weight (kg/hl)	U.S. No. 1	N/A	2	63.4	63.2	63.8	4	64.6	64.4	64.9	6	64.1
	All lots	N/A	2	63.4	63.2	63.8	4	64.6	64.4	64.9	6	64.1
Moisture	U.S. No. 1	N/A	2	7.9	7.8	8.0	4	7.3	6.6	7.5	6	7.6
	All lots	N/A	2	7.9	7.8	8.0	4	7.3	6.6	7.5	6	7.6
Heat-damaged kernels	U.S. No. 1	0.2	2	0.0	0.0	0.0	4	0.0	0.0	0.0	6	0.0
	All lots	N/A	2	0.0	0.0	0.0	4	0.0	0.0	0.0	6	0.0
Damaged Flaxseed (Total)	U.S. No. 1	10.0	2	0.0	0.0	0.0	4	0.1	0.0	0.2	6	0.0
	All lots	N/A	2	0.0	0.0	0.0	4	0.1	0.0	0.2	6	0.0
Dockage	U.S. No. 1	N/A	2	7.3	6.9	8.1	4	6.5	6.0	7.2	6	5.9
	All lots	N/A	2	7.3	6.9	8.1	4	6.5	6.0	7.2	6	5.9

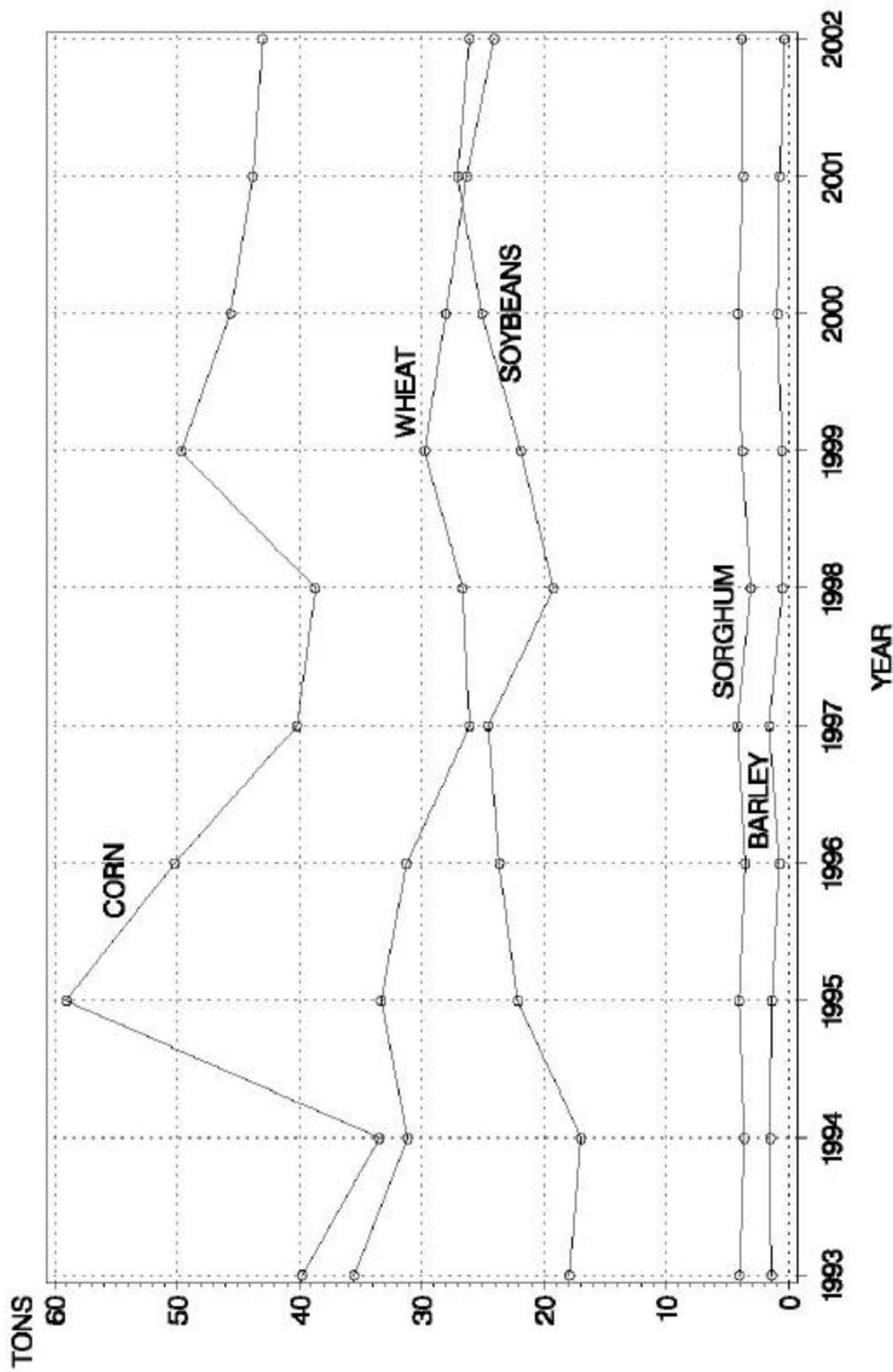
N/A=Does not apply.

-- =No lots reported in this category.

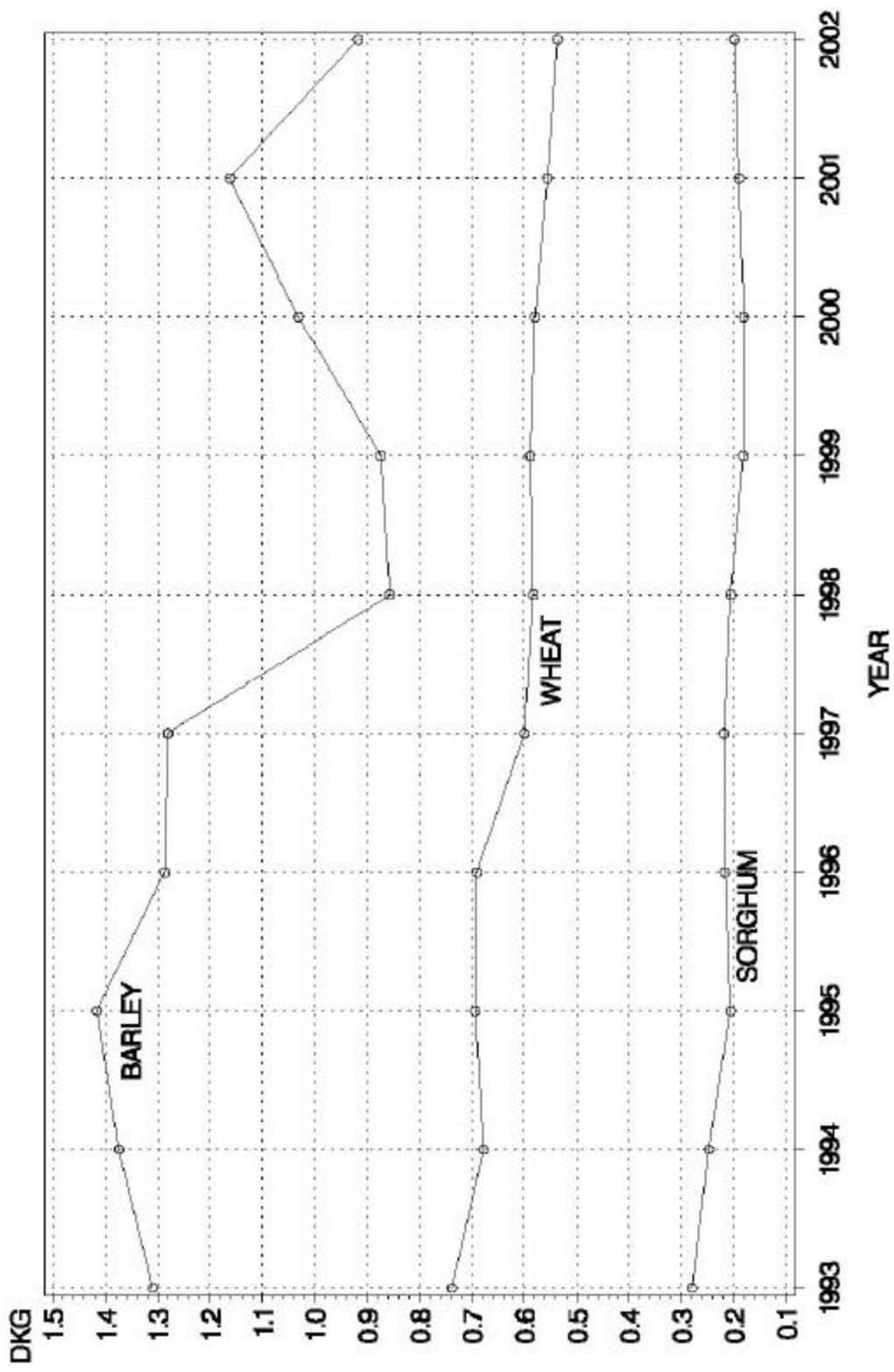
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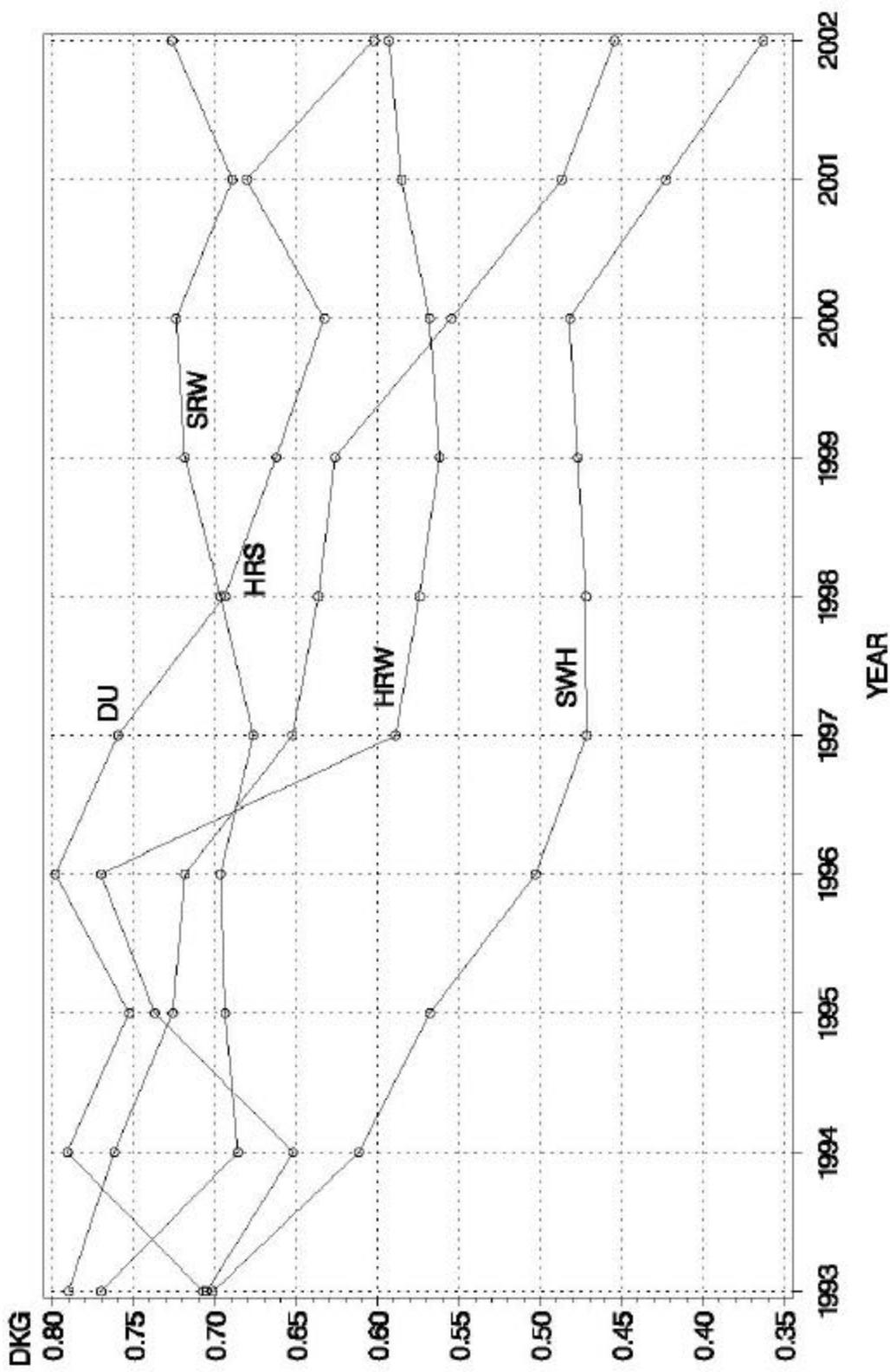
U.S. GRAIN QUANTITY EXPORTED, 1993–2002
METRIC TONS IN MILLIONS



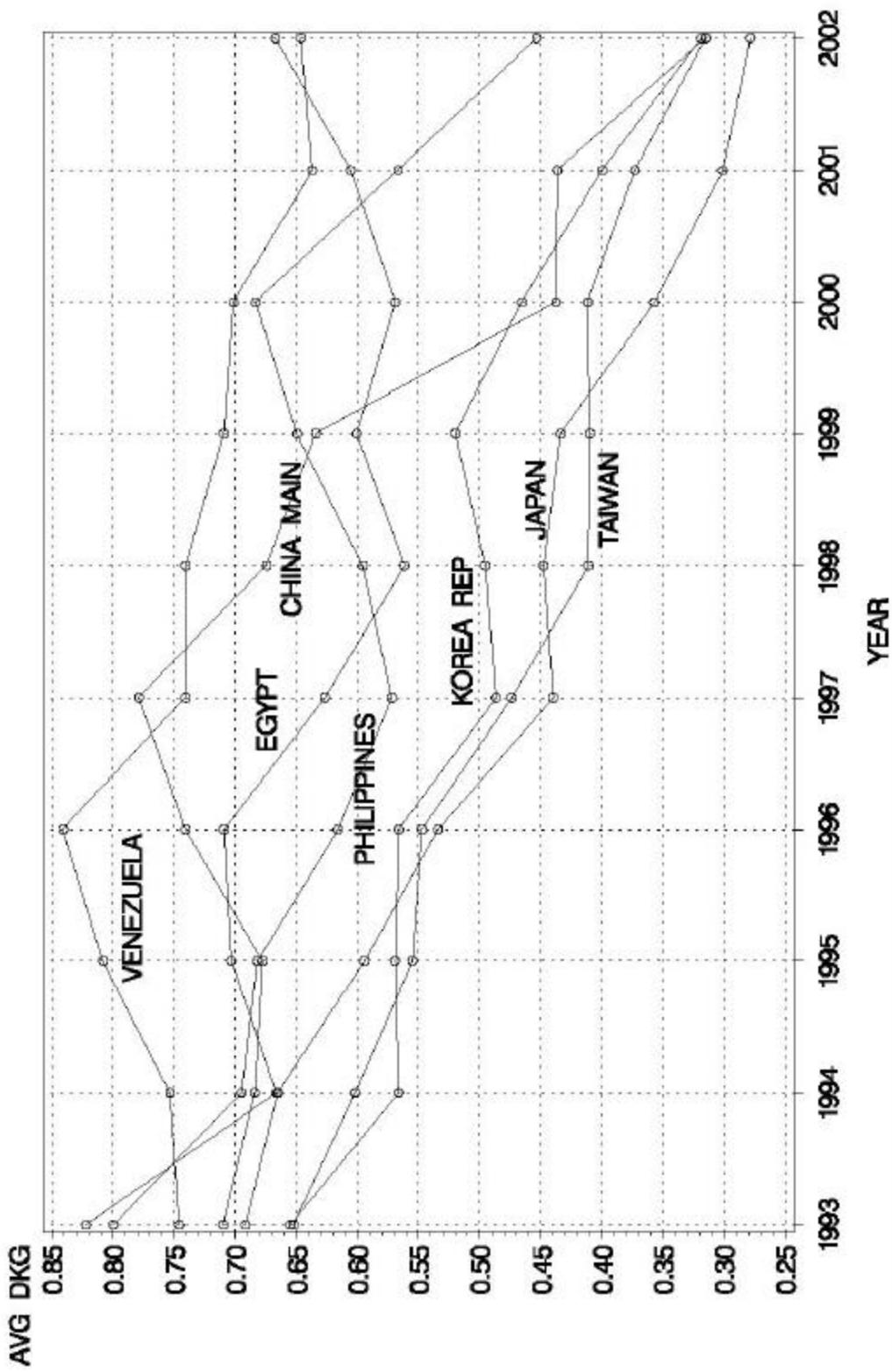
U.S. GRAIN EXPORTED, 1993 – 2002
Avg Dockage by Grain



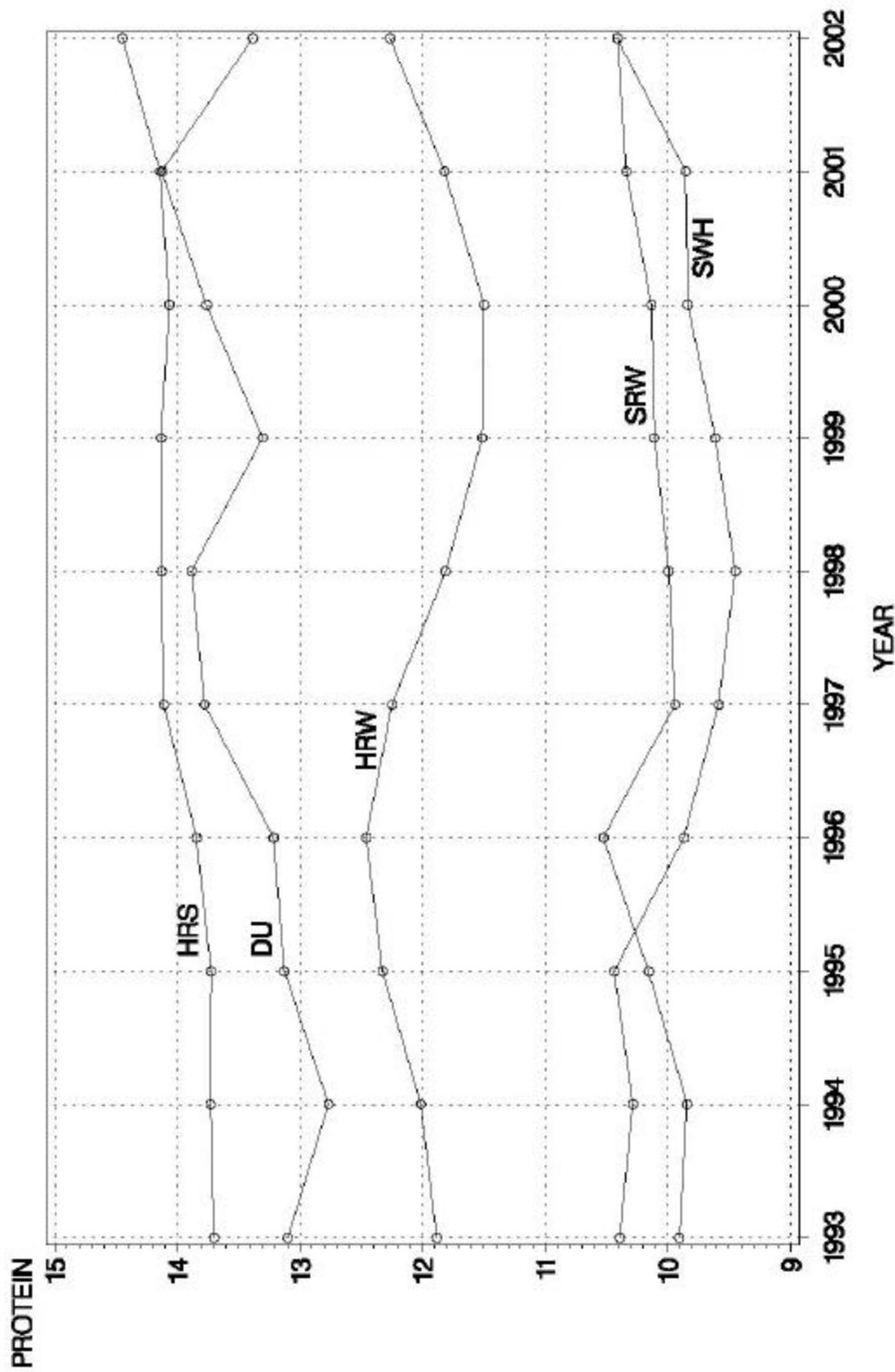
U.S. WHEAT EXPORTED, 1993–2002
Avg Dockage by Class



U.S. WHEAT EXPORTED, 1993 – 2002
Avg Dockage by Destination Country

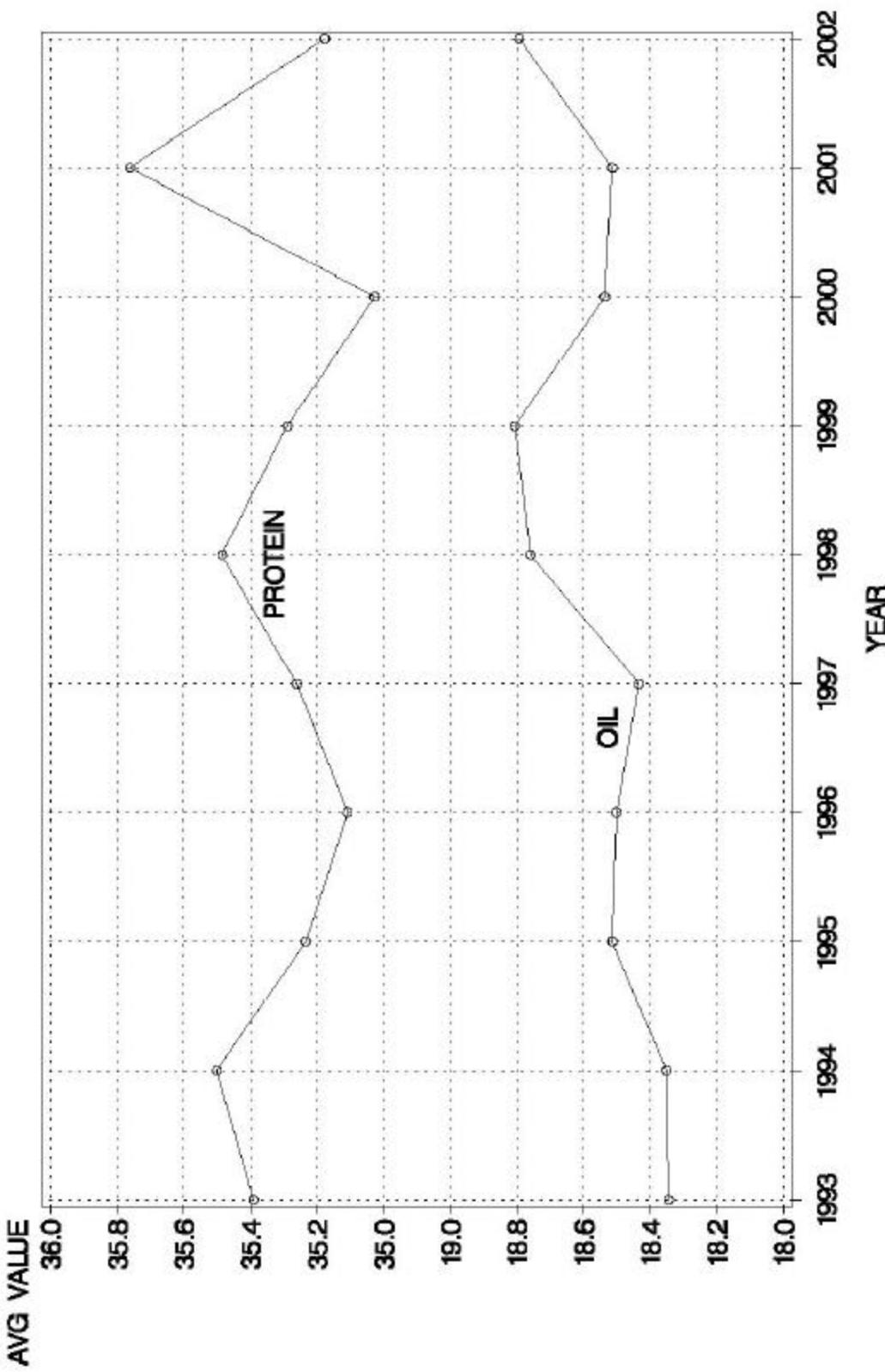


U.S. WHEAT EXPORTED, 1993 – 2002
Avg Protein(12% M) By Class



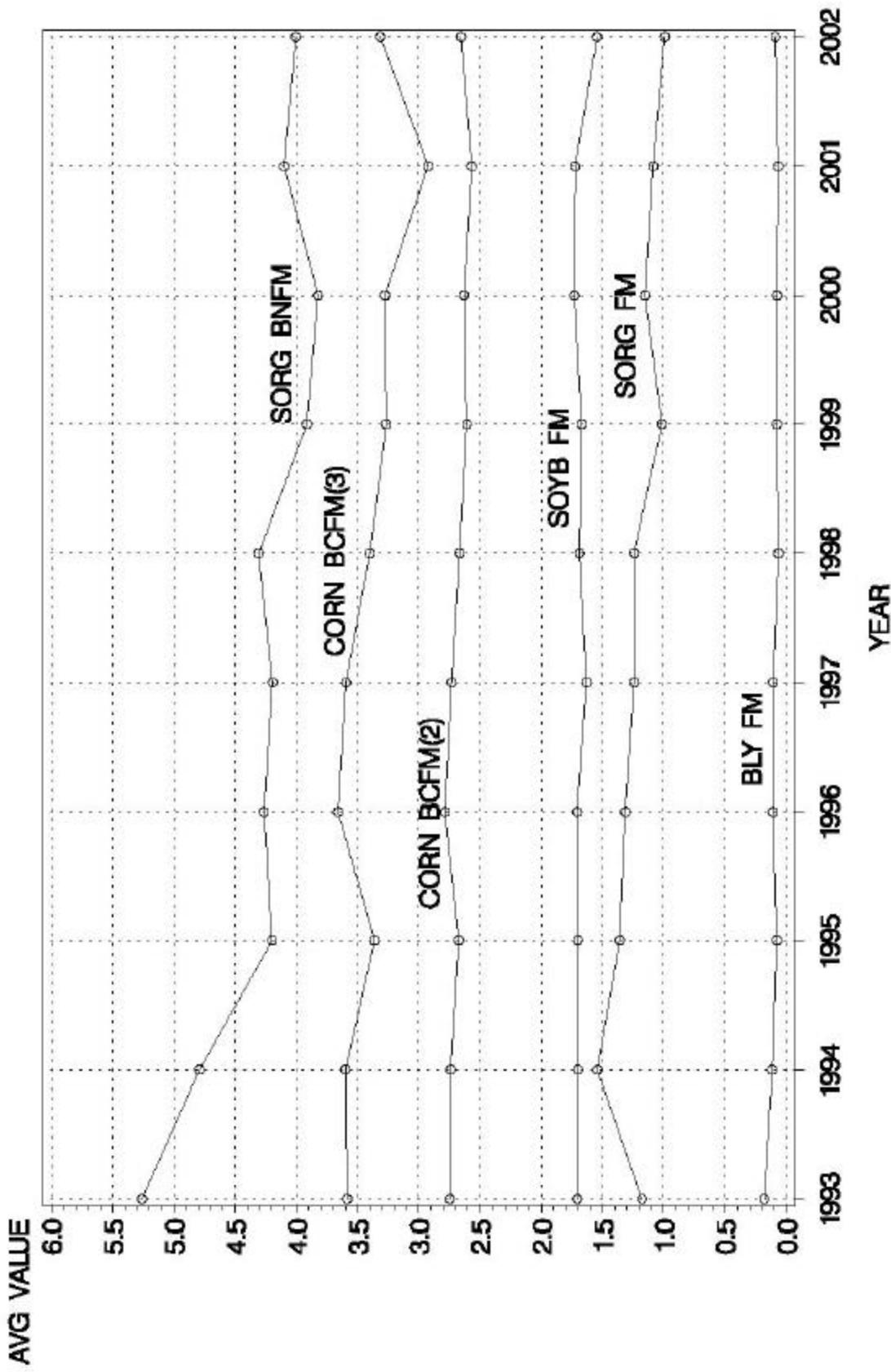
U.S. SOYBEANS EXPORTED, 1993–2002

Avg Protein and Oil (13% M)



U.S. GRAINS EXPORTED, 1993 – 2002

Avg FM BNFM BCFM



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