

Introduction

The *1998 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 1998 report is the fifteenth edition of this annual summary of export grain quality. The report summarizes the quality of export wheat, corn, soybeans, sorghum, barley, sunflower seeds, and oats. Mixed grain, flaxseed, 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, and
- * tables that clearly illustrate all factor result averages at each applicable U.S. grade level.

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 95 percent of the total export lots in the EGIS database for 1998.

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

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

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

Conversion Equation

$$\text{Bushels} = \frac{\text{Metric Tons} \times 2204.623 \text{ Pounds}}{\text{Legal Test Weight/Bushel of Grain}}$$

Legal Test Weight Per Bushel for Specific Grains

Wheat =	60 pounds/bushel
Corn =	56 pounds/bushel
Soybeans =	60 pounds/bushel
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:

- Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or
- Contains 32 or more insect-damaged kernels per 100 grams of wheat; or
- 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
- Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
- 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, 1996-98

Class	Grade	1996		1997		1998	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Hard Red Winter Wheat	U.S. No. 1	92	685,596	94	698,758	95	732,847
	U.S. No. 2	435	8,814,877	456	7,491,369	584	10,087,577
	U.S. No. 3	4	64,651	--	--	--	--
	U.S. No. 4	--	--	1	486	--	--
	U.S. Sample Grade	1	7,211	--	--	--	--
	All lots	532	9,572,335	557	8,190,613	679	10,820,424
Hard Red Spring Wheat	U.S. No. 1	126	1,178,655	130	1,255,900	153	1,468,682
	U.S. No. 2	626	7,398,964	547	5,502,004	525	5,220,911
	U.S. No. 3	11	53,863	3	26,841	1	3,777
	U.S. No. 4	1	810	1	1,157	--	--
	U.S. Sample Grade	4	28,110	--	--	--	--
	All lots	768	8,660,402	681	6,785,902	679	6,693,370
Soft Red Winter Wheat	U.S. No. 1	--	--	--	--	1	495
	U.S. No. 2	315	5,430,368	243	4,016,074	240	2,374,594
	U.S. No. 3	13	79,557	10	57,553	7	74,953
	All lots	328	5,509,925	253	4,073,627	248	2,450,042
Durum Wheat	U.S. No. 1	15	138,642	33	268,892	35	379,563
	U.S. No. 2	58	362,926	73	512,152	53	299,814
	U.S. No. 3	29	365,674	30	444,681	13	197,211
	U.S. No. 4	1	1,196	--	--	2	959
	All lots	103	868,438	136	1,225,725	103	877,547
Soft White Wheat	U.S. No. 1	141	694,503	159	719,613	141	728,428
	U.S. No. 2	292	5,684,142	288	5,259,826	248	5,034,472
	U.S. No. 5	3	48,000	--	--	--	--
	All lots	436	6,426,645	446	5,976,579	389	5,762,900
Hard White Wheat	U.S. No. 2	--	--	--	--	3	15,775
	All lots	--	--	--	--	3	15,775
Mixed Wheat	U.S. No. 2	2	45,502	3	34,151	--	--
	U.S. No. 3	1	27,400	--	--	--	--
	U.S. Sample Grade	4	122,170	--	--	--	--
	All lots	7	195,072	3	34,151	--	--
All Classes	U.S. No. 1	374	2,697,396	416	2,959,098	425	3,310,015
	U.S. No. 2	1,728	27,736,779	1,610	22,815,576	1,653	23,033,143
	U.S. No. 3	58	591,145	43	529,075	21	275,941
	U.S. No. 4	2	2,006	2	1,643	2	959
	U.S. No. 5	3	48,000	--	--	--	--
	U.S. Sample Grade	9	157,491	--	--	--	--
	All lots	2,174	31,232,817	2,071	26,305,392	2,101	26,620,058

-- = No lots reported in this category.

Table 2. Summary of export Hard Red Winter wheat quality, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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	60.0	92	62.4	60.5	64.5	94	62.3	60.4	65.4	95	62.0	60.5	63.5
	U.S. No. 2	58.4	435	60.6	58.4	64.6	456	61.1	58.5	64.9	584	61.7	59.3	64.7
	U.S. No. 3	56.0	4	60.4	58.3	60.7	--	--	--	--	--	--	--	--
	U.S. No. 4	54.0	--	--	--	--	1	62.0	62.0	62.0	--	--	--	--
	U.S. Sample Grade	N/A	1	60.3	60.3	60.3	--	--	--	--	--	--	--	--
	All lots	N/A	532	60.8	58.3	64.6	551	61.2	58.5	65.4	679	61.7	59.3	64.7
Test Weight (kg/hl)	U.S. No. 1	N/A	92	80.3	77.9	83.0	94	80.2	77.8	84.2	95	79.9	77.9	81.7
	U.S. No. 2	N/A	435	78.1	75.2	83.2	456	78.6	75.3	83.5	584	79.5	76.4	83.3
	U.S. No. 3	N/A	4	77.7	75.1	78.2	--	--	--	--	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	1	79.8	79.8	79.8	--	--	--	--
	U.S. Sample Grade	N/A	1	77.6	77.6	77.6	--	--	--	--	--	--	--	--
	All lots	N/A	532	78.2	75.1	83.2	547	78.7	75.3	84.2	679	79.5	76.4	83.3
Moisture	U.S. No. 1	N/A	92	10.7	7.4	12.6	94	10.7	9.0	11.9	95	10.8	9.7	12.1
	U.S. No. 2	N/A	435	11.5	8.4	13.2	456	11.8	9.0	13.4	584	11.3	9.5	12.7
	U.S. No. 3	N/A	4	11.4	11.3	12.6	--	--	--	--	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	1	11.3	11.3	11.3	--	--	--	--
	U.S. Sample Grade	N/A	1	12.3	12.3	12.3	--	--	--	--	--	--	--	--
	All lots	N/A	532	11.5	7.4	13.2	551	11.7	9.0	13.4	679	11.3	9.5	12.7
Heat-damaged Kernels	U.S. No. 1	0.2	92	0.0	0.0	0.1	94	0.0	0.0	0.0	95	0.0	0.0	0.0
	U.S. No. 2	0.2	435	0.0	0.0	0.1	456	0.0	0.0	0.1	584	0.0	0.0	0.2
	U.S. No. 3	0.5	4	0.0	0.0	0.2	--	--	--	--	--	--	--	--
	U.S. No. 4	1.0	--	--	--	--	1	0.0	0.0	0.0	--	--	--	--
	U.S. Sample Grade	N/A	1	0.5	0.5	0.5	--	--	--	--	--	--	--	--
	All lots	N/A	532	0.0	0.0	0.5	551	0.0	0.0	0.1	679	0.0	0.0	0.2
Damaged Kernels (Total)	U.S. No. 1	2.0	92	0.3	0.0	1.0	94	0.1	0.0	0.6	95	0.2	0.0	1.1
	U.S. No. 2	4.0	435	1.3	0.0	2.7	456	1.0	0.0	2.9	584	0.9	0.0	2.7
	U.S. No. 3	7.0	4	1.5	1.3	3.1	--	--	--	--	--	--	--	--
	U.S. No. 4	10.0	--	--	--	--	1	0.6	0.6	0.6	--	--	--	--
	U.S. Sample Grade	N/A	1	39.5	39.5	39.5	--	--	--	--	--	--	--	--
	All lots	N/A	532	1.3	0.0	39.5	551	1.0	0.0	2.9	679	0.8	0.0	2.7
Foreign Material	U.S. No. 1	0.4	92	0.2	0.1	0.4	94	0.2	0.0	0.4	95	0.2	0.1	0.4
	U.S. No. 2	0.7	435	0.3	0.1	0.6	456	0.2	0.1	0.7	584	0.2	0.0	0.6
	U.S. No. 3	1.3	4	0.3	0.3	0.4	--	--	--	--	--	--	--	--
	U.S. No. 4	3.0	--	--	--	--	1	2.2	2.2	2.2	--	--	--	--
	U.S. Sample Grade	N/A	1	0.3	0.3	0.3	--	--	--	--	--	--	--	--
	All lots	N/A	532	0.3	0.1	0.6	551	0.2	0.0	2.2	679	0.2	0.0	0.6

continued

Table 2. Summary of export Hard Red Winter wheat quality, 1996-98--Continued

Factor	Grade	1996					1997					1998			
		Grade Limit	No. of Lots	No. of			No. of Lots	No. of			No. of Lots	No. of			
				Avg.	Low	High		Avg.	Low	High		Avg.	Low	High	
Shrunken and Broken	U.S.No. 1	3.0	92	1.7	0.4	2.6	94	1.7	0.3	2.5	95	1.6	0.9	2.2	
	U.S.No. 2	5.0	435	2.3	0.7	3.8	456	1.7	0.5	3.0	584	1.7	0.5	2.8	
	U.S.No. 3	8.0	4	2.9	2.8	3.2	--	--	--	--	--	--	--	--	
	U.S.No. 4	12.0	--	--	--	--	1	1.5	1.5	1.5	--	--	--	--	
	U.S. Sample Grade	N/A	1	2.4	2.4	2.4	--	--	--	--	--	--	--	--	
	All lots	N/A	532	2.2	0.4	3.8	551	1.7	0.3	3.0	679	1.7	0.5	2.8	
Total Defects¹	U.S.No. 1	3.0	92	2.2	0.6	2.9	94	2.0	0.3	2.9	95	1.9	1.2	2.8	
	U.S.No. 2	5.0	435	3.9	0.9	5.0	456	2.9	0.7	4.9	584	2.8	1.0	4.9	
	U.S.No. 3	8.0	4	4.7	4.4	6.4	--	--	--	--	--	--	--	--	
	U.S.No. 4	12.0	--	--	--	--	1	4.3	4.3	4.3	--	--	--	--	
	U.S. Sample Grade	N/A	1	42.2	42.2	42.2	--	--	--	--	--	--	--	--	
	All lots	N/A	532	3.8	0.6	42.2	551	2.9	0.3	4.9	679	2.7	1.0	4.9	
Dockage	U.S.No. 1	N/A	92	0.5	0.3	0.9	94	0.5	0.3	0.7	95	0.5	0.2	0.7	
	U.S.No. 2	N/A	435	0.8	0.3	2.5	456	0.6	0.2	1.2	584	0.6	0.0	1.6	
	U.S.No. 3	N/A	4	0.9	0.6	1.3	--	--	--	--	--	--	--	--	
	U.S.No. 4	N/A	--	--	--	--	1	0.5	0.5	0.5	--	--	--	--	
	U.S. Sample Grade	N/A	1	0.9	0.9	0.9	--	--	--	--	--	--	--	--	
	All lots	N/A	32	0.8	0.3	2.5	551	0.6	0.2	1.2	679	0.6	0.0	1.6	
Wheat of Other Classes	U.S.No. 1	3.0	92	1.1	0.0	2.5	94	1.1	0.0	3.0	95	0.6	0.0	2.4	
	U.S.No. 2	5.0	435	1.7	0.0	4.9	456	1.8	0.0	4.9	584	1.4	0.0	4.9	
	U.S.No. 3	10.0	4	1.0	0.4	1.5	--	--	--	--	--	--	--	--	
	U.S.No. 4	10.0	--	--	--	--	1	0.6	0.6	0.6	--	--	--	--	
	U.S. Sample Grade	N/A	1	2.4	2.4	2.4	--	--	--	--	--	--	--	--	
	All lots	N/A	532	1.7	0.0	4.9	551	1.8	0.0	4.9	679	1.4	0.0	4.9	
Contrasting Classes	U.S.No. 1	1.0	92	0.3	0.0	0.9	94	0.3	0.0	1.0	95	0.3	0.0	1.0	
	U.S.No. 2	2.0	435	0.1	0.0	1.5	456	0.1	0.0	1.5	584	0.1	0.0	1.4	
	U.S.No. 3	3.0	4	0.0	0.0	0.0	--	--	--	--	--	--	--	--	
	U.S.No. 4	10.0	--	--	--	--	1	0.0	0.0	0.0	--	--	--	--	
	U.S. Sample Grade	N/A	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--	
	All lots	N/A	532	0.1	0.0	1.5	551	0.1	0.0	1.5	679	0.1	0.0	1.4	

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

continued

Table 2. Summary of export Hard Red Winter wheat quality, 1996-98--Continued

Factor	Grade	Grade Limit	1996			1997			1998					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Protein (as is basis)	U.S. No. 1	N/A	91	12.3	11.5	13.6	94	12.4	11.5	13.9	95	12.1	11.5	13.4
	U.S. No. 2	N/A	383	12.5	10.3	14.8	396	12.3	10.1	14.7	524	11.9	9.2	13.4
	U.S. No. 3	N/A	2	12.5	12.5	12.6	--	--	--	--	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	1	13.2	13.2	13.2	--	--	--	--
	U.S. Sample Grade	N/A	1	13.1	13.1	13.1	--	--	--	--	--	--	--	--
	All lots	N/A	477	12.5	10.3	14.8	491	12.3	10.1	14.7	619	11.9	9.2	13.4
Protein (12% moisture)	U.S. No. 1	N/A	91	12.1	11.5	13.4	94	12.2	11.5	13.6	95	12.0	11.5	13.2
	U.S. No. 2	N/A	383	12.5	10.2	14.8	396	12.2	10.2	14.7	524	11.8	9.0	13.1
	U.S. No. 3	N/A	2	12.5	12.4	12.6	--	--	--	--	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	1	13.1	13.1	13.1	--	--	--	--
	U.S. Sample Grade	N/A	1	13.1	13.1	13.1	--	--	--	--	--	--	--	--
	All lots	N/A	477	12.5	10.2	14.8	491	12.2	10.2	14.7	619	11.8	9.0	13.2

N/A = Does not apply.
 -- = No lots reported in this category.

Table 3. Summary of export Hard Red Spring wheat quality, 1996-98

Factor	Grade	Grade Limit	1996			1997			1998						
			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	58.0	126	61.6	59.4	63.0	130	61.5	59.6	63.3	153	61.0	59.1	62.8	
	U.S.No. 2	57.0	626	60.7	58.0	63.4	547	61.1	58.2	67.9	525	60.4	58.4	63.3	
	U.S.No. 3	55.0	11	59.5	58.2	60.6	3	59.0	58.9	59.3	1	58.6	58.6	58.6	
	U.S.No. 4	53.0	1	57.6	57.6	57.6	1	62.3	62.3	62.3	--	--	--	--	
	U.S. Sample Grade	N/A	4	54.3	53.1	55.4	--	--	--	--	--	--	--	--	--
	All lots	N/A	768	60.8	53.1	63.4	681	61.2	58.2	67.9	679	60.5	58.4	63.3	
Test Weight (kg/hl)	U.S.No. 1	N/A	126	79.3	76.4	81.1	130	79.1	76.7	81.4	153	78.5	76.0	80.8	
	U.S.No. 2	N/A	626	78.2	74.7	81.7	547	78.7	75.0	87.4	525	77.8	75.2	81.5	
	U.S.No. 3	N/A	11	76.7	74.9	78.0	3	76.0	75.9	76.4	1	75.5	75.5	75.5	
	U.S.No. 4	N/A	1	74.2	74.2	74.2	1	80.2	80.2	80.2	--	--	--	--	
	U.S. Sample Grade	N/A	4	69.9	68.4	71.3	--	--	--	--	--	--	--	--	--
	All lots	N/A	768	78.3	68.4	81.7	681	78.8	75.0	87.4	679	77.9	75.2	81.5	
Moisture	U.S.No. 1	N/A	126	11.8	10.0	13.3	130	11.7	9.9	13.3	153	11.6	9.7	13.2	
	U.S.No. 2	N/A	626	12.4	9.8	13.5	547	12.2	9.8	14.0	525	11.9	9.2	15.0	
	U.S.No. 3	N/A	11	13.0	12.8	13.5	3	13.0	12.9	13.3	1	12.7	12.7	12.7	
	U.S.No. 4	N/A	1	13.5	13.5	13.5	1	9.7	9.7	9.7	--	--	--	--	
	U.S. Sample Grade	N/A	4	13.4	13.3	13.5	--	--	--	--	--	--	--	--	--
	All lots	N/A	768	12.3	9.8	13.5	681	12.1	9.7	14.0	679	11.8	9.2	15.0	
Heat-damaged Kernels	U.S.No. 1	0.2	26	0.0	0.0	0.0	130	0.0	0.0	0.0	153	0.0	0.0	0.0	
	U.S.No. 2	0.2	626	0.0	0.0	0.1	547	0.0	0.0	0.2	525	0.0	0.0	0.2	
	U.S.No. 3	0.5	11	0.0	0.0	0.0	3	0.0	0.0	0.0	1	0.0	0.0	0.0	
	U.S.No. 4	1.0	1	0.1	0.1	0.1	1	0.0	0.0	0.0	--	--	--	--	
	U.S. Sample Grade	N/A	4	0.1	0.0	0.2	--	--	--	--	--	--	--	--	--
	All lots	N/A	768	0.0	0.0	0.2	681	0.0	0.0	0.2	679	0.0	0.0	0.2	
Damaged Kernels (Total)	U.S.No. 1	2.0	126	0.8	0.0	1.5	130	0.6	0.0	1.6	153	0.6	0.0	1.4	
	U.S.No. 2	4.0	626	2.0	0.0	3.6	547	1.4	0.0	3.4	525	1.3	0.0	3.3	
	U.S.No. 3	7.0	11	3.8	2.4	5.3	3	2.6	2.3	3.3	1	3.8	3.8	3.8	
	U.S.No. 4	10.0	1	6.4	6.4	6.4	1	0.1	0.1	0.1	--	--	--	--	
	U.S. Sample Grade	N/A	4	16.8	12.1	19.7	--	--	--	--	--	--	--	--	--
	All lots	N/A	768	1.9	0.0	19.7	681	1.3	0.0	3.4	679	1.2	0.0	3.8	
Foreign Material	U.S.No. 1	0.4	126	0.2	0.1	0.4	130	0.2	0.0	0.4	153	0.2	0.0	0.4	
	U.S.No. 2	0.7	626	0.3	0.1	0.7	547	0.2	0.0	0.6	525	0.2	0.0	0.7	
	U.S.No. 3	1.3	11	0.3	0.2	0.5	3	0.2	0.1	0.6	1	0.5	0.5	0.5	
	U.S.No. 4	3.0	1	0.6	0.6	0.6	1	0.2	0.2	0.2	--	--	--	--	
	U.S. Sample Grade	N/A	4	1.4	1.0	2.0	--	--	--	--	--	--	--	--	--
	All lots	N/A	768	0.3	0.1	2.0	681	0.2	0.0	0.6	679	0.2	0.0	0.7	

continued

Table 3. Summary of export Hard Red Spring wheat quality, 1996-98--Continued

Factor	Grade	Grade Limit	1996				1997				1998			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Shrunken and Broken	U.S.No. 1	3.0	126	1.6	0.7	2.4	130	1.6	0.7	2.3	153	1.7	0.9	2.8
	U.S.No. 2	5.0	626	1.6	0.8	2.3	547	1.5	0.3	2.7	525	1.8	0.9	3.4
	U.S.No. 3	8.01	11	1.6	1.4	1.9	3	1.9	1.6	2.0	1	1.7	1.7	1.7
	U.S.No. 4	12.0	1	1.7	1.7	1.7	1	1.3	1.3	1.3	--	--	--	--
	U.S. Sample Grade	N/A	4	4.9	3.8	5.8	--	--	--	--	--	--	--	--
	All lots	N/A	768	1.6	0.7	5.8	681	1.6	0.3	2.7	679	1.8	0.9	3.4
Total Defects¹	U.S.No. 1	3.0	126	2.5	1.7	3.0	130	2.4	1.3	3.0	153	2.5	1.4	3.0
	U.S.No. 2	5.0	626	3.8	1.5	5.0	547	3.2	0.6	5.0	525	3.3	1.2	5.0
	U.S.No. 3	8.0	11	5.7	4.4	7.2	3	4.8	4.5	5.5	1	6.0	6.0	6.0
	U.S.No. 4	12.0	1	8.7	8.7	8.7	1	1.6	1.6	1.6	--	--	--	--
	U.S. Sample Grade	N/A	4	23.2	18.9	26.5	--	--	--	--	--	--	--	--
	All lots	N/A	768	3.7	1.5	26.5	681	3.0	0.6	5.5	679	3.1	1.2	6.0
Dockage	U.S.No. 1	N/A	126	0.6	0.3	0.8	130	0.6	0.3	0.8	153	0.5	0.2	0.9
	U.S.No. 2	N/A	626	0.7	0.2	1.5	547	0.7	0.3	1.4	525	0.7	0.0	1.3
	U.S.No. 3	N/A	11	0.8	0.7	1.4	3	0.9	0.8	1.2	1	0.9	0.9	0.9
	U.S.No. 4	N/A	1	1.5	1.5	1.5	1	0.6	0.6	0.6	--	--	--	--
	U.S. Sample Grade	N/A	4	1.8	1.5	2.0	--	--	--	--	--	--	--	--
	All lots	N/A	768	0.7	0.2	2.0	681	0.7	0.3	1.4	679	0.6	0.0	1.3
Wheat of Other Classes	U.S.No. 1	3.0	126	0.5	0.0	2.1	130	0.5	0.0	2.1	153	0.4	0.0	2.2
	U.S.No. 2	5.0	626	1.2	0.0	4.8	547	1.1	0.0	4.8	525	1.1	0.0	4.9
	U.S.No. 3	10.0	11	0.8	0.0	3.1	3	2.6	0.0	3.1	1	0.0	0.0	0.0
	U.S.No. 4	10.0	1	0.0	0.0	0.0	1	3.3	3.3	3.3	--	--	--	--
	U.S. Sample Grade	N/A	4	4.5	1.7	6.3	--	--	--	--	--	--	--	--
	All lots	N/A	768	1.1	0.0	6.3	681	1.0	0.0	4.8	679	1.0	0.0	4.9
Contrasting Classes	U.S.No. 1	1.0	126	0.3	0.0	1.0	130	0.3	0.0	0.9	153	0.2	0.0	0.9
	U.S.No. 2	2.0	626	0.4	0.0	1.8	547	0.4	0.0	1.9	525	0.3	0.0	1.5
	U.S.No. 3	3.0	11	0.0	0.0	0.1	3	0.0	0.0	0.0	1	0.0	0.0	0.0
	U.S.No. 4	10.0	1	0.0	0.0	0.0	1	3.2	3.2	3.2	--	--	--	--
	U.S. Sample Grade	N/A	4	1.1	0.0	4.9	--	--	--	--	--	--	--	--
	All lots	N/A	768	0.4	0.0	4.9	681	0.4	0.0	3.2	679	0.3	0.0	1.5

continued

Table 3. Summary of export Hard Red Spring wheat quality, 1996-98--Continued

Factor	Grade	Grade Limit	1996			1997			1998					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Protein (as is basis)	U.S. No. 1	N/A	126	14.3	13.5	15.2	130	14.4	13.6	15.3	153	14.5	13.9	15.2
	U.S. No. 2	N/A	602	13.7	10.0	15.3	539	14.0	13.0	15.4	519	14.1	13.0	15.5
	U.S. No. 3	N/A	11	14.0	13.4	14.6	3	14.2	14.0	14.4	1	14.2	14.2	14.2
	U.S. No. 4	N/A	1	14.3	14.3	14.3	1	14.2	14.2	14.2	--	--	--	--
	U.S. Sample Grade	N/A	4	13.9	13.1	14.5	--	--	--	--	--	--	--	--
	All lots	N/A	744	13.8	10.0	15.3	673	14.1	13.0	15.4	673	14.2	13.0	15.5
Protein (12% moisture)	U.S. No. 1	N/A	126	14.2	13.6	15.3	130	14.3	13.4	15.4	153	14.4	14.0	15.3
	U.S. No. 2	N/A	602	13.8	10.0	15.1	539	14.1	13.0	15.2	519	14.1	13.0	15.3
	U.S. No. 3	N/A	11	14.2	13.5	14.8	3	14.3	14.2	14.6	1	14.3	14.3	14.3
	U.S. No. 4	N/A	1	14.5	14.5	14.5	1	13.8	13.8	13.8	--	--	--	--
	U.S. Sample Grade	N/A	4	14.1	13.3	14.7	--	--	--	--	--	--	--	--
	All lots	N/A	744	13.8	10.0	15.3	673	14.1	13.0	15.4	673	14.1	13.0	15.3

N/A = Does not apply.

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

Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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	60.0	--	--	--	--	--	--	--	--	1	60.2	60.2	60.2
	U.S.No. 2	58.0	315	58.8	58.0	61.0	243	59.8	58.0	62.3	240	59.4	58.0	61.8
	U.S.No. 3	56.0	13	57.5	56.2	58.8	10	57.7	57.1	59.3	7	59.9	56.2	61.0
	All lots	N/A	328	58.8	56.2	61.0	253	59.8	57.1	62.3	248	59.4	56.2	61.8
Test Weight (kg/hl)	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	1	77.5	77.5	77.5
	U.S.No. 2	N/A	315	75.7	74.7	78.5	243	77.0	74.7	80.2	240	76.5	74.7	79.6
	U.S.No. 3	N/A	13	74.1	72.3	75.7	10	74.3	73.5	76.4	7	77.1	72.3	78.5
	All lots	N/A	328	75.6	72.3	78.5	253	76.9	73.5	80.2	248	76.5	72.3	79.6
Moisture	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	1	13.0	13.0	13.0
	U.S.No. 2	N/A	315	13.0	11.5	13.7	243	13.2	11.9	14.0	240	13.0	11.1	13.4
	U.S.No. 3	N/A	13	13.0	11.8	13.3	10	13.1	12.6	13.5	7	12.8	12.0	13.3
	All lots	N/A	328	13.0	11.5	13.7	253	13.2	11.9	14.0	248	13.0	11.1	13.4
Heat-damaged Kernels	U.S.No. 1	0.2	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	U.S.No. 2	0.2	315	0.0	0.0	0.2	243	0.0	0.0	0.1	240	0.0	0.0	0.1
	U.S.No. 3	0.5	13	0.0	0.0	0.0	10	0.0	0.0	0.0	7	0.0	0.0	0.0
	All lots	N/A	328	0.0	0.0	0.2	253	0.0	0.0	0.1	248	0.0	0.0	0.1
Damaged Kernels (Total)	U.S.No. 1	2.0	--	--	--	--	--	--	--	--	1	1.1	1.1	1.1
	U.S.No. 2	4.0	315	2.3	0.2	4.0	243	1.4	0.4	3.9	240	1.6	0.2	3.5
	U.S.No. 3	7.0	13	4.0	0.9	6.0	10	4.0	3.1	5.1	7	1.9	0.9	6.0
	All lots	N/A	328	2.3	0.2	6.0	253	1.4	0.4	5.1	248	1.7	0.2	6.0
Foreign Material	U.S.No. 1	0.4	--	--	--	--	--	--	--	--	1	0.2	0.2	0.2
	U.S.No. 2	0.7	315	0.1	0.0	0.5	243	0.1	0.0	0.3	240	0.2	0.0	0.7
	U.S.No. 3	1.3	13	0.2	0.1	0.3	10	0.2	0.1	0.4	7	0.2	0.1	0.6
	All lots	N/A	328	0.1	0.0	0.5	253	0.1	0.0	0.4	248	0.2	0.0	0.7
Shrunken and Broken	U.S.No. 1	3.0	--	--	--	--	--	--	--	--	1	0.8	0.8	0.8
	U.S.No. 2	5.0	315	1.1	0.4	2.9	243	0.8	0.5	2.2	240	0.9	0.3	1.9
	U.S.No. 3	8.0	13	1.4	0.8	2.1	10	1.4	0.9	1.7	7	1.0	0.7	1.8
	All lots	N/A	328	1.1	0.4	2.9	253	0.8	0.5	2.2	248	0.9	0.3	1.9
Total Defects ¹	U.S.No. 1	2.0	--	--	--	--	--	--	--	--	1	2.1	2.1	2.1
	U.S.No. 2	5.0	315	3.5	1.2	5.0	243	2.3	1.0	4.9	240	2.7	1.1	4.7
	U.S.No. 3	8.0	13	5.6	3.0	7.3	10	5.6	4.5	6.9	7	3.0	1.8	7.8
	All lots	N/A	328	3.6	1.2	7.3	253	2.3	1.0	6.9	248	2.7	1.1	7.8
Dockage	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	1	0.6	0.6	0.6
	U.S.No. 2	N/A	315	0.7	0.3	1.6	243	0.7	0.3	1.4	240	0.7	0.0	1.5
	U.S.No. 3	N/A	13	1.0	0.3	1.4	10	1.0	0.7	1.4	7	0.7	0.6	1.2
	All lots	N/A	328	0.7	0.3	1.6	253	0.7	0.3	1.4	248	0.7	0.0	1.5

continued

Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 1996-98--Continued

Factor	Grade	Grade Limit	1996				1997				1998			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Wheat of Other Classes	U.S.No. 1	3.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	U.S.No. 2	5.0	315	0.7	0.0	5.0	240	0.4	0.0	4.5	240	0.5	0.0	5.0
	U.S.No. 3	10.0	13	1.4	0.0	6.3	10	2.1	0.0	5.0	7	0.4	0.0	6.8
	All lots	N/A	328	0.7	0.0	6.3	250	0.4	0.0	5.0	248	0.5	0.0	6.8
Contrasting Classes	U.S.No. 1	1.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	U.S.No. 2	2.0	315	0.0	0.0	0.8	240	0.0	0.0	0.8	240	0.0	0.0	1.0
	U.S.No. 3	3.0	13	0.0	0.0	0.1	10	0.0	0.0	0.0	7	0.0	0.0	0.0
	All lots	N/A	328	0.0	0.0	0.8	250	0.0	0.0	0.8	248	0.0	0.0	1.0
Protein (as is basis)	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	1	10.0	10.0	10.0
	U.S.No. 2	N/A	138	10.4	9.2	12.7	130	9.8	9.0	12.7	173	9.9	9.0	12.7
	U.S.No. 3	N/A	7	10.6	9.7	10.9	9	10.7	10.5	10.9	5	10.5	9.5	10.7
	All lots	N/A	145	10.4	9.2	12.7	139	9.8	9.0	12.7	179	9.9	9.0	12.7
Protein (12% moisture)	U.S.No. 2	N/A	138	10.5	9.3	12.8	130	9.9	9.1	12.7	1	10.1	10.1	10.1
	U.S.No. 3	N/A	7	10.7	9.8	11.0	9	10.8	10.6	11.0	173	10.0	9.1	12.8
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	5	10.6	9.5	10.8
	All lots	N/A	145	10.5	9.3	12.8	139	9.9	9.1	12.7	179	10.0	9.1	12.8

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.

Table 5. Summary of export Durum wheat quality, factor averages by grade, 1996-98

Factor	Grade	1996					1997					1998			
		Grade Limit	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	60.0	15	62.7	61.5	63.9	33	62.4	61.0	64.4	35	61.9	60.0	63.9	
	U.S.No. 2	58.0	58	60.5	58.7	63.4	73	60.3	58.4	62.5	53	60.0	59.0	61.5	
	U.S.No. 3	56.0	29	59.0	58.0	60.2	30	59.0	58.0	60.9	13	59.3	58.9	60.3	
	U.S.No. 4	54.0	1	59.2	59.2	59.2	--	--	--	--	2	60.1	60.0	60.1	
	All lots	N/A	103	60.2	58.0	63.9	136	60.3	58.0	64.4	103	60.7	58.9	63.9	
Test Weight (kg/hl)	U.S.No. 1	N/A	15	80.7	79.1	82.3	33	80.3	78.5	82.9	35	79.7	77.2	82.2	
	U.S.No. 2	N/A	58	77.8	75.6	81.6	73	77.6	75.1	80.5	53	77.3	75.9	79.3	
	U.S.No. 3	N/A	29	75.9	74.7	77.5	30	75.9	74.7	78.3	13	76.4	75.8	77.7	
	U.S.No. 4	N/A	1	76.2	76.2	76.2	--	--	--	--	2	77.3	77.2	77.4	
	All lots	N/A	103	77.5	74.7	82.3	136	77.6	74.7	82.9	103	78.1	75.8	82.2	
Moisture	U.S.No. 1	N/A	15	7.5	6.7	9.0	33	8.1	7.1	12.9	35	9.3	7.2	12.3	
	U.S.No. 2	N/A	58	12.2	7.8	13.4	73	12.6	7.5	13.8	53	12.2	11.3	12.9	
	U.S.No. 3	N/A	29	13.0	12.7	13.3	30	12.9	12.4	13.5	13	12.5	11.7	12.9	
	U.S.No. 4	N/A	1	12.8	12.8	12.8	--	--	--	--	2	12.1	11.9	12.5	
	All lots	N/A	103	11.8	6.7	13.4	136	11.7	7.1	13.8	103	11.0	7.2	12.9	
Heat-damaged Kernels	U.S.No. 1	0.2	15	0.0	0.0	0.0	33	0.0	0.0	0.0	35	0.0	0.0	0.0	
	U.S.No. 2	0.2	58	0.0	0.0	0.0	73	0.0	0.0	0.1	53	0.0	0.0	0.0	
	U.S.No. 3	0.5	29	0.0	0.0	0.0	30	0.0	0.0	0.0	13	0.0	0.0	0.0	
	U.S.No. 4	1.0	1	0.0	0.0	0.0	--	--	--	--	2	0.0	0.0	0.0	
	All lots	N/A	103	0.0	0.0	0.0	136	0.0	0.0	0.1	103	0.0	0.0	0.0	
Damaged Kernels (Total)	U.S.No. 1	2.0	15	0.5	0.2	1.2	33	0.5	0.2	1.3	35	0.6	0.0	1.2	
	U.S.No. 2	4.0	58	2.0	0.1	2.7	73	2.1	0.4	3.1	53	1.7	0.3	2.6	
	U.S.No. 3	7.0	49	4.0	2.3	5.3	30	4.0	2.9	5.0	13	3.2	2.1	4.2	
	U.S.No. 4	10.0	1	6.3	6.3	6.3	--	--	--	--	2	2.7	2.0	3.9	
	All lots	N/A	103	2.6	0.1	6.3	136	2.5	0.2	5.0	103	1.6	0.0	4.2	
Foreign Material	U.S.No. 1	0.4	15	0.2	0.1	0.3	33	0.2	0.1	0.4	35	0.2	0.1	0.3	
	U.S.No. 2	0.7	58	0.4	0.1	0.6	73	0.3	0.1	0.7	53	0.4	0.2	0.7	
	U.S.No. 3	1.3	29	0.5	0.2	1.0	30	0.6	0.3	0.8	13	0.6	0.3	0.8	
	U.S.No. 4	3.0	1	0.5	0.5	0.5	--	--	--	--	2	0.5	0.5	0.5	
	All lots	N/A	103	0.4	0.1	1.0	136	0.4	0.1	0.8	103	0.4	0.1	0.8	
Shrunken and Broken	U.S.No. 1	3.0	15	0.7	0.3	1.3	33	0.9	0.1	2.3	35	1.1	0.3	2.2	
	U.S.No. 2	5.0	58	1.7	0.6	2.4	73	1.8	0.5	2.3	53	2.2	1.7	2.9	
	U.S.No. 3	8.0	29	2.3	1.5	3.0	30	2.2	1.6	2.8	13	2.4	2.0	3.6	
	U.S.No. 4	12.0	1	2.1	2.1	2.1	--	--	--	--	2	1.7	1.7	1.7	
	All lots	N/A	103	1.8	0.3	3.0	136	1.7	0.1	2.8	103	1.8	0.3	3.6	
Total Defects¹	U.S.No. 1	3.0	15	1.3	1.0	2.1	33	1.6	0.5	2.8	35	1.9	0.9	3.0	
	U.S.No. 2	5.0	58	4.0	1.3	5.0	73	4.3	1.4	5.0	53	4.3	2.4	5.0	
	U.S.No. 3	8.0	29	6.8	4.5	7.9	30	6.7	5.1	7.9	13	6.2	4.8	7.6	
	U.S.No. 4	12.0	1	8.9	8.9	8.9	--	--	--	--	2	4.9	4.2	6.1	
	All lots	N/A	103	4.8	1.0	8.9	136	4.6	0.5	7.9	103	3.7	0.9	7.6	

N/A = Does not apply.

-- = No lots reported in this category.

continued

Table 5. Summary of export Durum wheat quality, factor averages by grade, 1996-98--Continued

Factor	Grade	Grade Limit	1996				1997				1998			
			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	15	0.8	0.4	1.2	33	0.7	0.2	1.1	35	0.6	0.3	0.9
	U.S.No. 2	N/A	58	0.8	0.1	1.2	73	0.7	0.2	1.2	53	0.7	0.0	1.0
	U.S.No. 3	N/A	29	0.8	0.4	1.2	30	0.8	0.5	1.1	13	0.7	0.5	0.9
	U.S.No. 4	N/A	1	0.8	0.8	0.8	--	--	--	--	2	0.6	0.6	0.7
	All lots	N/A	103	0.8	0.1	1.2	136	0.8	0.2	1.2	103	0.7	0.0	1.0
Contrasting Classes	U.S.No. 1	1.0	15	0.0	0.0	0.2	33	0.1	0.0	0.9	35	0.3	0.0	1.0
	U.S.No. 2	2.0	58	0.9	0.0	1.8	73	1.0	0.0	2.0	53	1.1	0.1	2.0
	U.S.No. 3	3.0	29	1.5	0.0	2.5	30	1.4	0.7	2.5	13	1.8	0.7	2.7
	U.S.No. 4	10.0	1	0.6	0.6	0.6	--	--	--	--	2	3.7	3.2	4.7
	All lots	N/A	103	1.0	0.0	2.5	136	0.9	0.0	2.5	103	0.9	0.0	4.7
Protein (as is basis)	U.S.No. 1	N/A	--	--	--	--	17	14.6	12.4	15.6	23	14.2	12.7	15.7
	U.S.No. 2	N/A	20	13.0	11.2	14.4	23	13.4	12.6	14.1	22	14.0	13.3	14.3
	U.S.No. 3	N/A	4	13.3	13.0	13.5	2	13.5	13.4	13.6	1	14.4	14.4	14.4
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	2	14.2	14.2	14.2
	All lots	N/A	24	13.1	11.2	14.4	42	13.9	12.4	15.6	48	14.1	12.7	15.7
Protein (12% moisture)	U.S.No. 1	N/A	--	--	--	--	17	14.0	12.0	14.8	23	13.8	12.1	15.0
	U.S.No. 2	N/A	20	13.1	11.3	14.2	23	13.6	12.6	14.2	22	14.0	13.3	14.2
	U.S.No. 3	N/A	4	13.5	13.2	13.6	2	13.6	13.5	13.7	1	14.5	14.5	14.5
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	2	14.2	14.2	14.3
	All lots	N/A	24	13.2	11.3	14.2	42	13.8	12.0	14.8	48	13.9	12.1	15.0

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

Table 6. Summary of export Soft White wheat quality, factor averages by grade, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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	60.0	141	61.8	60.6	63.2	159	61.9	60.4	63.2	141	61.5	60.2	63.3
	U.S. No. 2	58.0	292	61.7	59.6	63.2	288	61.5	60.0	63.2	248	61.3	59.8	62.9
	U.S. No. 5	51.0	3	61.3	61.3	61.3	--	--	--	--	--	--	--	--
	All lots	N/A	436	61.7	59.6	63.2	447	61.6	60.0	63.2	389	61.3	59.8	63.3
Test Weight (kg/hl)	U.S. No. 1	N/A	141	79.6	78.0	81.4	159	79.6	77.7	81.3	141	79.2	77.6	81.5
	U.S. No. 2	N/A	292	79.4	76.8	81.4	288	79.2	77.2	81.3	248	78.9	77.0	81.0
	U.S. No. 5	N/A	3	78.9	78.9	78.9	--	--	--	--	--	--	--	--
	All lots	N/A	436	79.4	76.8	81.4	447	79.3	77.2	81.3	389	78.9	77.0	81.5
Moisture	U.S. No. 1	N/A	141	9.9	8.4	11.3	159	9.8	8.6	11.0	141	9.7	8.6	10.9
	U.S. No. 2	N/A	292	9.7	8.7	11.6	288	9.9	8.1	11.6	248	9.5	8.6	11.1
	U.S. No. 5	N/A	3	9.0	8.9	9.2	--	--	--	--	--	--	--	--
	All lots	N/A	436	9.7	8.4	11.6	447	9.9	8.1	11.6	389	9.5	8.6	11.1
Heat-damaged Kernels	U.S. No. 1	0.2	141	0.0	0.0	0.1	159	0.0	0.0	0.0	141	0.0	0.0	0.0
	U.S. No. 2	0.2	292	0.0	0.0	0.0	288	0.0	0.0	0.1	248	0.0	0.0	0.0
	U.S. No. 5	3.0	3	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	All lots	N/A	436	0.0	0.0	0.1	447	0.0	0.0	0.1	389	0.0	0.0	0.0
Damaged Kernels (Total)	U.S. No. 1	2.0	141	0.1	0.0	0.9	159	0.1	0.0	0.8	141	0.1	0.0	0.7
	U.S. No. 2	4.0	292	0.2	0.0	3.1	288	0.2	0.0	3.2	248	0.2	0.0	1.9
	U.S. No. 5	15.0	3	0.1	0.1	0.2	--	--	--	--	--	--	--	--
	All lots	N/A	436	0.2	0.0	3.1	447	0.2	0.0	3.2	389	0.2	0.0	1.9
Foreign Material	U.S. No. 1	0.4	141	0.1	0.0	0.4	159	0.1	0.0	0.4	141	0.1	0.0	0.4
	U.S. No. 2	0.7	292	0.2	0.0	0.9	288	0.2	0.0	0.5	248	0.2	0.0	0.5
	U.S. No. 5	5.0	3	0.6	0.1	1.9	--	--	--	--	--	--	--	--
	All lots	N/A	436	0.2	0.0	1.9	447	0.1	0.0	0.5	389	0.2	0.0	0.5
Shrunken and Broken	U.S. No. 1	3.0	141	1.0	0.6	1.5	159	1.0	0.5	1.9	141	0.9	0.3	1.4
	U.S. No. 2	5.0	292	1.0	0.7	2.1	288	1.0	0.3	2.2	248	0.9	0.6	1.4
	U.S. No. 5	20.0	3	1.2	1.1	1.6	--	--	--	--	--	--	--	--
	All lots	N/A	436	1.0	0.6	2.1	447	1.0	0.3	2.2	389	0.9	0.3	1.4
Total Defects¹	U.S. No. 1	3.0	141	1.3	0.7	2.3	159	1.2	0.6	2.1	141	1.1	0.3	2.2
	U.S. No. 2	5.0	292	1.4	0.8	4.4	288	1.3	0.5	4.6	248	1.2	0.8	2.8
	U.S. No. 5	20.0	3	1.9	1.3	3.6	--	--	--	--	--	--	--	--
	All lots	N/A	436	1.4	0.7	4.4	447	1.3	0.5	4.6	389	1.2	0.3	2.8
Dockage	U.S. No. 1	N/A	141	0.5	0.3	0.7	159	0.4	0.2	0.7	141	0.4	0.2	0.7
	U.S. No. 2	N/A	292	0.5	0.3	1.0	288	0.5	0.3	1.0	248	0.5	0.2	1.1
	U.S. No. 5	N/A	3	0.7	0.6	1.0	--	--	--	--	--	--	--	--
	All lots	N/A	436	0.5	0.3	1.0	447	0.5	0.2	1.0	389	0.5	0.2	1.1

continued

Table 6. Summary of export Soft White wheat quality, factor averages by grade, 1996-98--Continued

Factor	Grade	1996					1997					1998			
		Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	
Wheat of Other Classes	U.S.No. 1	3.0	141	0.3	0.0	1.0	159	0.3	0.0	0.9	141	0.3	0.0	0.9	
	U.S.No. 2	5.0	292	0.5	0.0	1.6	288	0.4	0.0	1.7	248	0.3	0.0	1.7	
	U.S.No. 5	10.0	3	1.7	0.3	5.6	--	--	--	--	--	--	--	--	
	All lots	N/A	436	0.5	0.0	5.6	447	0.3	0.0	1.7	389	0.3	0.0	1.7	
Contrasting Classes	U.S.No. 1	1.0	141	0.3	0.0	1.0	159	0.3	0.0	0.9	141	0.3	0.0	0.9	
	U.S.No. 2	2.0	292	0.5	0.0	1.6	288	0.4	0.0	1.7	248	0.3	0.0	1.7	
	U.S.No. 5	10.0	3	1.7	0.3	5.6	--	--	--	--	--	--	--	--	
	All lots	N/A	436	0.5	0.0	5.6	447	0.3	0.0	1.7	389	0.3	0.0	1.7	
Protein (as is basis)	U.S.No. 1	N/A	135	9.9	8.6	11.0	158	9.8	8.5	10.9	140	9.7	8.2	10.5	
	U.S.No. 2	N/A	179	10.2	9.0	11.1	180	9.8	8.9	10.6	165	9.7	8.6	10.5	
	U.S.No. 5	N/A	1	10.4	10.4	10.4	--	--	--	--	--	--	--	--	
	All lots	N/A	315	10.1	8.6	11.1	338	9.8	8.5	10.9	305	9.7	8.2	10.5	
Protein (12% moisture)	U.S.No. 1	N/A	135	9.7	8.4	10.8	158	9.5	8.4	10.6	140	9.4	8.0	10.2	
	U.S.No. 2	N/A	179	9.9	8.9	10.9	180	9.6	8.7	10.3	165	9.5	8.4	10.2	
	U.S.No. 5	N/A	1	10.1	10.1	10.1	--	--	--	--	--	--	--	--	
	All lots	N/A	315	9.9	8.4	10.9	338	9.6	8.4	10.6	305	9.5	8.0	10.2	

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.

Table 7. Summary of export Hard White wheat quality, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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. 2	58.0	--	--	--	--	--	--	--	--	3	61.7	60.9	62.1
	All lots	N/A	--	--	--	--	--	--	--	--	3	61.7	60.9	62.1
Test Weight (kg/hl)	U.S.No. 2	N/A	--	--	--	--	--	--	--	--	3	79.4	78.4	79.9
	All lots	N/A	--	--	--	--	--	--	--	--	3	79.4	78.4	79.9
Moisture	U.S.No. 2	N/A	--	--	--	--	--	--	--	--	3	9.6	9.3	10.3
	All lots	N/A	--	--	--	--	--	--	--	--	3	9.6	9.3	10.3
Heat-damaged Kernels	U.S.No. 2	0.2	--	--	--	--	--	--	--	--	3	0.0	0.0	0.0
	All lots	N/A	--	--	--	--	--	--	--	--	3	0.0	0.0	0.0
Damaged Kernels (Total)	U.S.No. 2	4.0	--	--	--	--	--	--	--	--	3	0.0	0.0	0.0
	All lots	N/A	--	--	--	--	--	--	--	--	3	0.0	0.0	0.0
Foreign Material	U.S.No. 2	0.7	--	--	--	--	--	--	--	--	3	0.1	0.1	0.2
	All lots	N/A	--	--	--	--	--	--	--	--	3	0.1	0.1	0.2
Shrunken and Broken	U.S.No. 2	5.0	--	--	--	--	--	--	--	--	3	1.9	1.4	2.0
	All lots	N/A	--	--	--	--	--	--	--	--	3	1.9	1.4	2.0
Total Defects	U.S.No. 2	5.0	--	--	--	--	--	--	--	--	3	2.0	1.5	2.1
	All lots	N/A	--	--	--	--	--	--	--	--	3	2.0	1.5	2.1
Dockage	U.S.No. 2	N/A	--	--	--	--	--	--	--	--	3	1.0	0.9	1.4
	All lots	N/A	--	--	--	--	--	--	--	--	3	1.0	0.9	1.4
Wheat of other Classes	U.S.No. 2	5.0	--	--	--	--	--	--	--	--	3	0.8	0.4	0.9
	All lots	N/A	--	--	--	--	--	--	--	--	3	0.8	0.4	0.9
Contrasting Classes	U.S.No. 2	2.0	--	--	--	--	--	--	--	--	3	0.8	0.4	0.9
	All lots	N/A	--	--	--	--	--	--	--	--	3	0.8	0.4	0.9
Protein (as is basis)	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	3	12.1	11.8	12.2
	All lots	N/A	--	--	--	--	--	--	--	--	3	12.1	11.8	12.2
Protein (12% moisture)	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	3	11.8	11.6	11.9
	All lots	N/A	--	--	--	--	--	--	--	--	3	11.8	11.6	11.9

N/A = Does not apply.

-- = No lots reported in this category.

Table 8. Summary of export Mixed wheat quality, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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. 2	58.0	2	60.7	59.8	61.6	3	60.1	60.0	60.3	--	--	--	--
	U.S.No. 3	56.0	1	59.6	59.6	59.6	--	--	--	--	--	--	--	--
	U.S.No. 4	54.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	57.0	54.4	57.8	--	--	--	--	--	--	--	--
	All lots	N/A	7	58.2	54.4	61.6	3	60.1	60.0	60.3	--	--	--	--
Test Weight (kg/hl)	U.S.No. 2	N/A	2	78.2	77.0	79.4	3	77.4	77.2	77.6	--	--	--	--
	U.S.No. 3	N/A	1	76.8	76.8	76.8	--	--	--	--	--	--	--	--
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	73.4	70.0	74.5	--	--	--	--	--	--	--	--
	All lots	N/A	7	75.0	70.0	79.4	3	77.4	77.2	77.6	--	--	--	--
Moisture	U.S.No. 2	N/A	2	11.8	10.9	12.7	3	12.7	12.0	13.3	--	--	--	--
	U.S.No. 3	N/A	1	13.6	13.6	13.6	--	--	--	--	--	--	--	--
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	13.1	12.8	13.5	--	--	--	--	--	--	--	--
	All lots	N/A	7	12.9	10.9	13.6	3	12.7	12.0	13.3	--	--	--	--
Heat-damaged Kernels	U.S.No. 2	0.2	2	0.0	0.0	0.0	3	0.0	0.0	0.0	--	--	--	--
	U.S.No. 3	0.5	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S.No. 4	1.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	2.5	0.1	8.0	--	--	--	--	--	--	--	--
	All lots	N/A	7	1.6	0.0	8.0	3	0.0	0.0	0.0	--	--	--	--
Damaged Kernels (Total)	U.S.No. 2	4.0	2	2.0	1.6	2.4	3	0.9	0.9	1.6	--	--	--	--
	U.S.No. 3	7.0	1	3.6	3.6	3.6	--	--	--	--	--	--	--	--
	U.S.No. 4	10.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	44.9	19.0	91.8	--	--	--	--	--	--	--	--
	All lots	N/A	7	29.1	1.6	91.8	3	0.9	0.9	1.6	--	--	--	--
Foreign Material	U.S.No. 2	0.7	2	0.2	0.1	0.3	3	0.2	0.1	0.2	--	--	--	--
	U.S.No. 3	1.3	1	0.3	0.3	0.3	--	--	--	--	--	--	--	--
	U.S.No. 4	3.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	0.6	0.3	1.4	--	--	--	--	--	--	--	--
	All lots	N/A	7	0.5	0.1	1.4	3	0.2	0.1	0.2	--	--	--	--

continued

Table 8. Summary of export Mixed wheat quality, 1996-98--Continued

Factor	Grade	1996					1997				1998			
		Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Shrunken and Broken	U.S.No. 2	5.0	2	1.8	1.5	2.0	3	1.2	1.0	1.2	--	--	--	--
	U.S.No. 3	8.0	1	1.3	1.3	1.3	--	--	--	--	--	--	--	--
	U.S.No. 4	12.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	2.5	1.7	4.2	--	--	--	--	--	--	--	--
	All lots	N/A	7	2.2	1.3	4.2	3	1.2	1.0	1.2	--	--	--	--
Total Defects	U.S.No. 2	5.0	2	4.0	3.2	4.7	3	2.3	2.3	2.7	--	--	--	--
	U.S.No. 3	8.0	1	5.2	5.2	5.2	--	--	--	--	--	--	--	--
	U.S.No. 4	12.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	48.1	23.3	95.2	--	--	--	--	--	--	--	--
	All lots	N/A	7	31.7	3.2	95.2	3	2.3	2.3	2.7	--	--	--	--
Dockage	U.S.No. 2	N/A	2	0.9	0.9	1.0	3	0.8	0.6	1.1	--	--	--	--
	U.S.No. 3	N/A	1	0.9	0.9	0.9	--	--	--	--	--	--	--	--
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	1.3	0.9	2.2	--	--	--	--	--	--	--	--
	All lots	N/A	7	1.2	0.9	2.2	3	0.8	0.6	1.1	--	--	--	--
Wheat of other classes	U.S.No. 2	5.0	2	0.0	0.0	0.0	3	0.0	0.0	0.0	--	--	--	--
	U.S.No. 3	10.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S.No. 4	10.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	All lots	N/A	7	0.0	0.0	0.0	3	0.0	0.0	0.0	--	--	--	--
Contrasting Classes	U.S.No. 2	2.0	2	0.0	0.0	0.0	3	0.0	0.0	0.0	--	--	--	--
	U.S.No. 3	3.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S.No. 4	10.0	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	4	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	All lots	N/A	7	0.0	0.0	0.0	3	0.0	0.0	0.0	--	--	--	--
Protein (as is basis)	U.S.No. 2	N/A	2	10.9	10.6	11.2	--	--	--	--	--	--	--	--
	U.S.No. 3	N/A	1	10.9	10.9	10.9	--	--	--	--	--	--	--	--
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	3	12.7	12.6	12.9	--	--	--	--	--	--	--	--
	All lots	N/A	6	11.8	10.6	12.9	--	--	--	--	--	--	--	--
Protein (12% moisture)	U.S.No. 2	N/A	2	10.9	10.7	11.1	--	--	--	--	--	--	--	--
	U.S.No. 3	N/A	1	11.1	11.1	11.1	--	--	--	--	--	--	--	--
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	3	12.8	12.7	13.1	--	--	--	--	--	--	--	--
	All lots	N/A	6	11.9	10.7	13.1	--	--	--	--	--	--	--	--

-- = 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 cockleburrs, 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.

Table 9. U.S. Corn Exports: Number of lots and quantity exported by class and grade, 1996-98

Class	Grade	1996		1997		1998	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Yellow Corn	U.S. No. 1	36	415,247	28	208,700	51	446,083
	U.S. No. 2	1,038	23,786,278	864	17,807,087	1,023	18,464,394
	U.S. No. 3	711	25,459,768	641	21,793,331	598	18,946,037
	U.S. No. 4	3	4,827	4	22,541	2	25,675
	U.S. No. 5	--	--	1	3,408	3	14,024
	U.S. Sample Grade	1	410	1	3,938	--	--
	Not inspected	8	25,096	9	30,369	2	4,962
	All lots	1,797	49,691,626	1,548	39,869,374	1,679	37,901,175
White Corn	U.S. No. 1	8	44,740	7	43,295	5	29,327
	U.S. No. 2	31	426,393	33	343,105	47	746,293
	U.S. No. 3	2	6,470	1	2,874	4	10,990
	U.S. No. 5	--	--	2	2,552	--	--
	U.S. Sample Grade	--	--	--	--	1	1,435
	Not inspected	1	1,501	--	--	--	--
	All lots	42	479,104	43	391,826	57	788,045
	All Classes	U.S. No. 1	44	459,987	35	251,995	56
U.S. No. 2		1,069	24,212,671	897	18,150,192	1,070	19,210,687
U.S. No. 3		713	25,466,238	642	21,796,205	602	18,957,027
U.S. No. 4		3	4,827	4	22,541	2	25,675
U.S. No. 5		--	--	3	5,960	3	14,024
U.S. Sample Grade		1	410	1	3,938	1	1,435
Not inspected		9	26,597	9	30,369	2	4,962
All lots		1,839	50,170,730	1,591	40,261,200	1,736	38,689,220

-- = No lots reported in this category.

Not inspected = These lots were sold without grade designation.

Table 10. Summary of export Yellow corn quality, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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	36	57.2	56.0	59.7	28	57.9	56.2	59.4	51	57.9	56.0	60.3
	U.S. No. 2	54.0	1,038	56.1	54.1	60.3	864	55.7	54.0	59.9	1,023	56.9	54.0	60.9
	U.S. No. 3	52.0	711	55.9	52.6	59.1	641	55.6	52.7	59.2	597	57.0	53.0	59.9
	U.S. No. 4	49.0	3	53.1	52.3	56.6	4	53.3	49.5	53.9	2	56.6	56.6	56.6
	U.S. No. 5	46.0	--	--	--	--	1	56.3	56.3	56.3	3	55.8	54.4	57.5
	U.S. Sample Grade	N/A	1	57.4	57.4	57.4	1	53.8	53.8	53.8	--	--	--	--
	All lots	N/A	1,789	56.0	52.3	60.3	1,539	55.7	49.5	59.9	1,676	57.0	53.0	60.9
Test Weight (kg/hl)	U.S. No. 1	N/A	36	73.7	72.1	76.8	28	74.5	72.3	76.5	51	74.5	72.1	77.6
	U.S. No. 2	N/A	1,038	72.2	69.6	77.6	864	71.8	69.5	77.1	1,023	73.2	69.5	78.4
	U.S. No. 3	N/A	711	72.0	67.8	76.0	641	71.6	67.8	76.2	597	73.4	68.2	77.1
	U.S. No. 4	N/A	3	68.3	67.3	72.9	4	68.6	63.7	69.4	2	72.9	72.8	72.9
	U.S. No. 5	N/A	--	--	--	--	1	72.5	72.5	72.5	3	71.8	70.1	74.0
	U.S. Sample Grade	N/A	1	73.9	73.9	73.9	1	69.2	69.2	69.2	--	--	--	--
	All lots	N/A	1,789	72.1	67.3	77.6	1,539	71.7	63.7	77.1	1,676	73.3	68.2	78.4
Moisture	U.S. No. 1	N/A	36	14.2	13.3	14.9	28	14.5	13.1	15.2	51	14.3	13.7	14.9
	U.S. No. 2	N/A	1,038	14.3	13.1	15.4	864	14.4	12.3	15.4	1,023	14.3	12.6	15.3
	U.S. No. 3	N/A	711	14.5	13.4	15.5	641	14.7	13.3	15.7	597	14.6	5.2	15.5
	U.S. No. 4	N/A	3	14.8	13.7	15.0	4	14.0	11.3	14.2	2	14.1	14.1	14.2
	U.S. No. 5	N/A	--	--	--	--	1	14.8	14.8	14.8	3	14.0	13.8	14.1
	U.S. Sample Grade	N/A	1	14.6	14.6	14.6	1	14.6	14.6	14.6	--	--	--	--
	All lots	N/A	1,789	14.4	13.1	15.5	1,539	14.6	11.3	15.7	1,676	14.5	5.2	15.5
Heat-damaged Kernels	U.S. No. 1	0.1	36	0.0	0.0	0.0	28	0.0	0.0	0.0	51	0.0	0.0	0.0
	U.S. No. 2	0.2	1,038	0.0	0.0	0.2	864	0.0	0.0	0.1	1,023	0.0	0.0	0.1
	U.S. No. 3	0.5	711	0.0	0.0	0.2	641	0.0	0.0	0.2	597	0.0	0.0	0.2
	U.S. No. 4	1.0	3	0.0	0.0	0.0	4	0.0	0.0	0.0	2	0.0	0.0	0.0
	U.S. No. 5	3.0	--	--	--	--	1	0.0	0.0	0.0	3	0.0	0.0	0.0
	U.S. Sample Grade	N/A	1	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--	--	--
	All lots	N/A	1,789	0.0	0.0	0.2	1,539	0.0	0.0	0.2	1,676	0.0	0.0	0.2
Damaged Kernels (Total)	U.S. No. 1	3.0	36	1.7	0.8	2.6	28	1.7	0.7	2.6	51	2.1	0.7	3.0
	U.S. No. 2	5.0	1,038	2.2	0.5	4.9	864	2.5	0.6	5.0	1,023	3.2	0.6	5.0
	U.S. No. 3	7.0	711	2.3	0.3	5.8	641	2.9	0.3	6.6	597	4.1	0.5	7.0
	U.S. No. 4	10.0	3	1.1	0.6	2.2	4	7.7	5.3	8.5	2	1.4	1.1	7.6
	U.S. No. 5	15.0	--	--	--	--	1	2.4	2.4	2.4	3	3.1	0.5	5.5
	U.S. Sample Grade	N/A	1	2.5	2.5	2.5	1	3.5	3.5	3.5	--	--	--	--
	All lots	N/A	1,789	2.2	0.3	5.8	1,539	2.7	0.3	8.5	1,676	3.7	0.5	7.6

continued

Table 10. Summary of export Yellow corn quality, 1996-98--Continued

Factor	Grade	1996					1997					1998			
		Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	
Broken Corn and Foreign Material	U.S.No. 1	2.0	36	1.8	1.1	1.9	28	1.8	1.0	2.0	51	1.8	1.1	2.0	
	U.S.No. 2	3.0	1,038	2.8	1.2	3.0	864	2.7	1.2	3.0	1,023	2.7	1.0	3.0	
	U.S.No. 3	4.0	711	3.7	2.0	4.0	641	3.6	1.9	4.0	597	3.4	0.0	4.0	
	U.S.No. 4	5.0	3	4.4	2.9	4.5	4	3.6	3.0	3.7	2	4.0	1.5	4.1	
	U.S.No. 5	7.0	--	--	--	--	1	5.6	5.6	5.6	3	4.5	2.3	6.1	
	U.S. Sample Grade	N/A	1	2.4	2.4	2.4	1	8.9	8.9	8.9	--	--	--	--	
	All lots	N/A	1,789	3.2	1.1	4.5	1,539	3.2	1.0	8.9	1,676	3.0	0.0	6.1	
Broken Corn	U.S.No. 1	N/A	1	1.3	1.3	1.3	2	1.5	1.5	1.6	3	1.4	1.3	1.5	
	U.S.No. 2	N/A	203	2.1	1.1	2.4	209	2.0	0.8	2.4	182	2.0	1.2	2.7	
	U.S.No. 3	N/A	145	2.6	1.9	3.9	117	2.5	0.5	3.0	46	2.5	1.8	3.6	
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S.No. 5	N/A	--	--	--	--	--	--	--	--	1	1.7	1.7	1.7	
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	349	2.4	1.1	3.9	328	2.2	0.5	3.0	232	2.2	1.2	3.6	
Foreign Material	U.S.No. 1	N/A	1	0.1	0.1	0.1	2	0.3	0.3	0.4	3	0.4	0.3	0.4	
	U.S.No. 2	N/A	203	0.7	0.2	1.2	209	0.7	0.3	1.1	182	0.7	0.3	2.0	
	U.S.No. 3	N/A	144	1.0	0.5	1.6	117	1.0	0.5	2.4	45	1.0	0.5	1.5	
	U.S.No. 4	N/A	--	--	--	--	--	--	--	--	--	--	--	--	
	U.S.No. 5	N/A	--	--	--	--	--	--	--	--	1	0.6	0.6	0.6	
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	--	--	--	--	
	All lots	N/A	348	0.8	0.1	1.6	328	0.8	0.3	2.4	231	0.8	0.3	2.0	

N/A = Does not apply.

-- = No lots reported in this category.

Table 11. Summary of export White corn quality, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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	8	58.6	57.3	60.6	7	59.3	58.3	60.0	5	59.1	57.4	60.0
	U.S.No. 2	54.0	31	58.0	56.3	59.5	33	58.3	56.7	60.1	47	59.2	56.4	60.6
	U.S.No. 3	52.0	2	59.2	58.2	59.8	1	58.2	58.2	58.2	4	58.7	58.0	60.2
	U.S.No. 5	46.0	--	--	--	--	2	56.7	55.4	57.8	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	1	58.1	58.1	58.1
	All lots	N/A	41	58.1	56.3	60.6	43	58.4	55.4	60.1	57	59.2	56.4	60.6
Test Weight (kg/hl)	U.S.No. 1	N/A	8	75.4	73.7	78.0	7	76.4	75.0	77.3	5	76.1	73.9	77.2
	U.S.No. 2	N/A	31	74.7	72.5	76.6	33	75.1	73.0	77.4	47	76.3	72.6	78.0
	U.S.No. 3	N/A	2	76.2	75.0	77.0	1	74.9	74.9	74.9	4	75.6	74.7	77.5
	U.S.No. 5	N/A	--	--	--	--	2	73.0	71.3	74.4	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	1	74.8	74.8	74.8
	All lots	N/A	41	74.8	72.5	78.0	43	75.2	71.3	77.4	57	76.2	72.6	78.0
Moisture	U.S.No. 1	N/A	8	13.9	13.0	14.5	7	14.2	13.9	14.5	5	13.8	13.4	14.8
	U.S.No. 2	N/A	31	14.1	13.4	14.7	33	14.2	13.1	14.5	47	13.9	11.1	14.5
	U.S.No. 3	N/A	2	13.2	12.8	13.4	1	12.7	12.7	12.7	4	13.7	13.2	14.8
	U.S.No. 5	N/A	--	--	--	--	2	13.3	12.9	13.7	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	1	14.6	14.6	14.6
	All lots	N/A	41	14.1	12.8	14.7	43	14.2	12.7	14.5	57	13.9	11.1	14.8
Heat-damaged Kernels	U.S.No. 1	0.1	8	0.0	0.0	0.0	7	0.0	0.0	0.0	5	0.0	0.0	0.0
	U.S.No. 2	0.2	31	0.0	0.0	0.0	33	0.0	0.0	0.0	47	0.0	0.0	0.0
	U.S.No. 3	0.5	2	0.0	0.0	0.0	1	0.0	0.0	0.0	4	0.0	0.0	0.0
	U.S.No. 5	3.0	--	--	--	--	2	0.0	0.0	0.0	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	All lots	N/A	41	0.0	0.0	0.0	43	0.0	0.0	0.0	57	0.0	0.0	0.0
Damaged Kernels (Total)	U.S.No. 1	3.0	8	1.9	0.9	2.3	7	1.6	0.9	2.3	5	1.7	1.1	2.4
	U.S.No. 2	5.0	31	1.5	0.9	3.2	33	2.2	0.9	4.5	47	2.6	0.5	4.9
	U.S.No. 3	7.0	2	1.8	1.7	1.9	1	1.2	1.2	1.2	4	3.6	2.9	6.1
	U.S.No. 5	15.0	--	--	--	--	2	3.4	1.2	6.0	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	1	5.6	5.6	5.6
	All lots	N/A	41	1.6	0.9	3.2	43	2.1	0.9	6.0	57	2.6	0.5	6.1
Broken Corn and Foreign Material	U.S.No. 1	2.0	8	1.6	0.8	1.9	7	1.7	1.4	1.9	5	1.6	1.2	1.8
	U.S.No. 2	3.0	31	2.5	1.6	3.0	33	2.5	1.1	2.9	47	2.5	1.3	3.0
	U.S.No. 3	4.0	2	3.4	3.3	3.4	1	1.1	1.1	1.1	4	3.1	1.3	3.8
	U.S.No. 5	7.0	--	--	--	--	2	5.5	5.4	5.5	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	1	2.1	2.1	2.1
	All lots	N/A	41	2.4	0.8	3.4	43	2.4	1.1	5.5	57	2.5	1.2	3.8

continued

Table 11. Summary of export White corn quality, 1996-98--Continued

Factor	Grade	Grade Limit	1996			1997			1998					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Broken Corn	U.S. No. 1	N/A	2	1.5	1.5	1.5	--	--	--	--	--	--	--	--
	U.S. No. 2	N/A	2	1.4	1.1	1.5	5	1.8	1.5	2.1	6	1.7	1.0	2.2
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	4	1.4	1.1	1.5	5	1.8	1.5	2.1	6	1.7	1.0	2.2
Foreign Material	U.S. No. 1	N/A	2	0.4	0.4	0.4	--	--	--	--	--	--	--	--
	U.S. No. 2	N/A	2	0.5	0.5	0.5	5	0.6	0.5	0.7	6	0.5	0.3	0.8
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. No. 5	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	--	--	--	--	--	--	--	--
	All lots	N/A	4	0.5	0.4	0.5	5	0.6	0.5	0.7	6	0.5	0.3	0.8

N/A = Does not apply.

-- = No lots reported in this category.

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 of animal filth, castor beans, crotalaria seeds, glass, stones, or unknown foreign substance in combination, per 1,000 grams of soybeans; 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.

Table 12. U.S. Soybean Exports: Number of lots and quantity exported by class and grade, 1996-98

Grade	1996		1997		1998	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S. No. 1	65	1,144,902	92	1,478,716	74	1,103,571
U.S. No. 2	996	22,305,476	1,026	23,024,639	813	17,924,040
U.S. No. 3	12	183,811	4	48,801	14	205,157
U.S. No. 4	--	--	1	735	--	--
U.S. Sample Grade	1	3,344	3	2,116	1	13,086
Not inspected	6	28,515	3	7,416	1	1,271
All lots	1,080	23,666,048	1,129	24,562,423	903	19,247,125

Not inspected = These lots were sold without grade designation.

Table 13. Summary of export Soybean quality, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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	65	56.5	56.0	58.4	92	56.6	56.0	58.4	74	56.5	56.0	57.8
	U.S. No. 2	54.0	996	56.2	54.1	58.1	1,026	56.4	54.0	59.7	813	56.0	54.0	59.3
	U.S. No. 3	52.0	12	55.8	54.0	57.3	4	55.0	54.7	56.3	14	54.6	53.6	55.4
	U.S. No. 4	49.0	--	--	--	--	1	55.4	55.4	55.4	--	--	--	--
	U.S. Sample Grade	N/A	1	52.2	52.2	52.2	3	56.5	56.2	56.7	1	55.6	55.6	55.6
	All lots	N/A	1,074	56.2	52.2	58.4	1,126	56.4	54.0	59.7	902	56.0	53.6	59.3
Test Weight (kg/hl)	U.S. No. 1	N/A	65	72.8	72.1	75.1	92	72.9	72.1	75.2	74	72.8	72.1	74.5
	U.S. No. 2	N/A	996	72.4	69.7	74.8	1,026	72.6	69.5	76.9	813	72.0	69.5	76.4
	U.S. No. 3	N/A	12	71.8	69.6	73.8	4	70.8	70.4	72.4	14	70.3	69.0	71.3
	U.S. No. 4	N/A	--	--	--	--	1	71.3	71.3	71.3	--	--	--	--
	U.S. Sample Grade	N/A	1	67.2	67.2	67.2	3	72.7	72.4	73.0	1	71.5	71.5	71.5
	All lots	N/A	1,074	72.4	67.2	75.1	1,126	72.6	69.5	76.9	902	72.1	69.0	76.4
Moisture	U.S. No. 1	N/A	65	11.9	10.8	13.4	92	12.4	11.0	14.0	74	11.9	10.6	13.7
	U.S. No. 2	N/A	996	12.2	9.8	14.0	1,026	12.6	10.3	14.3	813	12.3	0.0	14.0
	U.S. No. 3	N/A	12	12.4	10.4	13.5	4	11.0	10.7	14.6	14	11.0	10.6	13.1
	U.S. No. 4	N/A	--	--	--	--	1	13.9	13.9	13.9	--	--	--	--
	U.S. Sample Grade	N/A	1	12.7	12.7	12.7	3	12.6	12.5	13.3	1	12.2	12.2	12.2
	All lots	N/A	1,074	12.1	9.8	14.0	1,126	12.6	10.3	14.6	902	12.2	0.0	14.0
Heat-damaged Kernels	U.S. No. 1	0.2	65	0.0	0.0	0.1	92	0.0	0.0	0.1	74	0.0	0.0	0.2
	U.S. No. 2	0.5	996	0.1	0.0	0.5	1,026	0.1	0.0	0.4	813	0.1	0.0	0.5
	U.S. No. 3	1.0	12	0.2	0.0	0.2	4	0.0	0.0	0.0	14	0.0	0.0	0.1
	U.S. No. 4	3.0	--	--	--	--	1	1.6	1.6	1.6	--	--	--	--
	U.S. Sample Grade	N/A	1	1.4	1.4	1.4	3	0.0	0.0	0.0	1	0.1	0.1	0.1
	All lots	N/A	1,074	0.1	0.0	1.4	1,126	0.0	0.0	1.6	902	0.1	0.0	0.5
Damaged Kernels (Total)	U.S. No. 1	2.0	65	0.7	0.0	1.5	92	0.5	0.0	0.9	74	0.5	0.0	1.1
	U.S. No. 2	3.0	996	1.1	0.0	2.9	1,026	0.8	0.0	2.3	813	1.1	0.0	2.9
	U.S. No. 3	5.0	12	1.8	0.2	2.7	4	0.5	0.3	0.6	14	0.7	0.3	1.8
	U.S. No. 4	8.0	--	--	--	--	1	2.7	2.7	2.7	--	--	--	--
	U.S. Sample Grade	N/A	1	3.4	3.4	3.4	3	0.7	0.3	0.7	1	3.6	3.6	3.6
	All lots	N/A	1,074	1.1	0.0	3.4	1,126	0.8	0.0	2.7	902	1.0	0.0	3.6

continued

Table 13. Summary of export Soybean quality, 1996-98-Continued

Factor	Grade	1996					1997				1998			
		Grade Limit	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Foreign Material	U.S.No. 1	1.0	65	0.9	0.0	1.0	92	0.8	0.0	1.0	74	0.8	0.1	1.0
	U.S.No. 2	2.0	996	1.7	0.0	2.0	1,026	1.6	0.0	2.0	813	1.7	0.0	2.0
	U.S.No. 3	3.0	12	2.5	1.4	2.9	4	1.6	1.3	1.8	14	2.0	1.8	2.6
	U.S.No. 4	5.0	--	--	--	--	1	1.1	1.1	1.1	--	--	--	--
	U.S. Sample Grade	N/A	1	25.3	25.3	25.3	3	0.8	0.3	0.8	1	1.9	1.9	1.9
	All lots	N/A	1,074	1.7	0.0	25.3	1,126	1.6	0.0	2.0	902	1.6	0.0	2.6
Splits	U.S.No. 1	10.0	65	6.4	0.3	10.0	92	5.7	0.2	9.5	74	7.2	0.4	9.5
	U.S.No. 2	20.0	996	7.5	0.1	16.2	1,026	6.7	0.7	19.2	813	8.4	0.0	19.9
	U.S.No. 3	30.0	12	8.6	2.7	26.0	4	21.7	9.2	24.0	14	22.7	4.9	27.8
	U.S.No. 4	40.0	--	--	--	--	1	6.3	6.3	6.3	--	--	--	--
	U.S. Sample Grade	N/A	1	20.0	20.0	20.0	3	4.9	4.5	5.5	1	4.8	4.8	4.8
	All lots	N/A	1,074	7.4	0.1	26.0	1,126	6.6	0.2	24.0	902	8.5	0.0	27.8
Soybeans of Other Colors	U.S.No. 1	1.0	65	0.0	0.0	0.2	92	0.0	0.0	0.9	74	0.0	0.0	0.6
	U.S.No. 2	2.0	996	0.0	0.0	0.3	1,026	0.1	0.0	1.3	813	0.0	0.0	0.7
	U.S.No. 3	5.0	12	0.1	0.0	0.3	4	0.1	0.0	0.1	14	0.1	0.0	0.5
	U.S.No. 4	10.0	--	--	--	--	1	0.0	0.0	0.0	--	--	--	--
	U.S. Sample Grade	N/A	1	0.3	0.3	0.3	3	0.0	0.0	0.0	1	0.0	0.0	0.0
	All lots	N/A	1,074	0.0	0.0	0.3	1,126	0.1	0.0	1.3	902	0.0	0.0	0.7
Protein (adjusted to 13% moisture)	U.S.No. 1	N/A	45	35.2	34.3	38.8	80	35.3	33.8	38.1	57	35.5	33.9	38.6
	U.S.No. 2	N/A	555	35.1	33.0	37.7	573	35.3	34.0	37.6	522	35.5	19.0	38.2
	U.S.No. 3	N/A	6	35.2	34.2	35.8	1	38.0	38.0	38.0	--	--	--	--
	U.S.No. 4	N/A	--	--	--	--	1	35.1	35.1	35.1	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	2	35.0	34.1	35.2	1	35.6	35.6	35.6
	All lots	N/A	606	35.1	33.0	38.8	657	35.3	33.8	38.1	580	35.5	19.0	38.6
Oil (adjusted to 13% moisture)	U.S.No. 1	N/A	45	18.4	16.5	19.4	80	18.3	16.3	19.3	57	18.6	16.5	19.7
	U.S.No. 2	N/A	560	18.5	16.9	20.0	575	18.4	16.4	20.4	521	18.8	16.9	35.3
	U.S.No. 3	N/A	6	19.0	17.9	19.7	1	17.5	17.5	17.5	--	--	--	--
	U.S.No. 4	N/A	--	--	--	--	1	19.0	19.0	19.0	--	--	--	--
	U.S. Sample Grade	N/A	--	--	--	--	2	18.5	18.4	18.9	1	19.5	19.5	19.5
	All lots	N/A	611	18.5	16.5	20.0	659	18.4	16.3	20.4	579	18.8	16.5	35.3

N/A = Does not apply.

-- = No lots reported in this category.

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 per 1,000 grams of sorghum; 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, foreign material, and other grains consist of all matter, other than dockage, that passes through a 5/64 triangular-hole sieve and all matter other than sorghum that remains in the sieved sample.

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, 1996-98

Class	Grade	1996		1997		1998	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Yellow Sorghum	U.S. No. 2	273	3,526,868	346	4,203,189	267	3,111,061
	U.S. No. 3		3,850	--	--	--	--
	All lots	274	3,530,718	346	4,203,189	267	3,111,061
All Classes	U.S. No. 2	273	3,526,868	346	4,203,189	267	3,111,061
	U.S. No. 3	1	3,850	--	--	--	--
	All lots	274	3,530,718	346	4,203,189	267	3,111,061

-- = No lots reported in this category.

Table 15. Summary of export Sorghum quality, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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. 2	55.0	273	57.9	56.1	60.2	346	58.8	56.5	60.4	267	58.8	56.3	60.1
	U.S. No. 3	53.0	1	57.5	57.5	57.5	--	--	--	--	--	--	--	--
	All lots	N/A	274	57.9	56.1	60.2	346	58.8	56.5	60.4	267	58.8	56.3	60.1
Test Weight (kg/hl)	U.S. No. 2	N/A	273	74.6	72.2	77.5	346	75.7	72.8	77.8	267	75.7	72.4	77.4
	U.S. No. 3	N/A	1	74.0	74.0	74.0	--	--	--	--	--	--	--	--
	All lots	N/A	274	74.6	72.2	77.5	346	75.7	72.8	77.8	267	75.7	72.4	77.4
Moisture	U.S. No. 2	N/A	273	13.4	11.8	14.3	346	13.8	12.3	14.3	267	13.6	12.5	14.0
	U.S. No. 3	N/A	1	13.8	13.8	13.8	--	--	--	--	--	--	--	--
	All lots	N/A	274	13.4	11.8	14.3	346	13.8	12.3	14.3	267	13.6	12.5	14.0
Heat-damaged Kernels	U.S. No. 2	0.5	273	0.0	0.0	0.1	346	0.0	0.0	0.1	267	0.0	0.0	0.1
	U.S. No. 3	1.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	All lots	N/A	274	0.0	0.0	0.1	346	0.0	0.0	0.1	267	0.0	0.0	0.1
Damaged Kernels (Total)	U.S. No. 2	5.0	273	1.0	0.1	2.8	346	0.9	0.0	2.4	267	1.0	0.0	4.1
	U.S. No. 3	10.0	1	0.7	0.7	0.7	--	--	--	--	--	--	--	--
	All lots	N/A	274	1.0	0.1	2.8	346	0.9	0.0	2.4	267	1.0	0.0	4.1
Broken Kernels and Foreign Material	U.S. No. 2	7.0	273	4.3	2.6	6.7	346	4.2	1.2	6.2	267	4.3	2.7	6.0
	U.S. No. 3	10.0	1	5.9	5.9	5.9	--	--	--	--	--	--	--	--
	All lots	N/A	274	4.3	2.6	6.7	346	4.2	1.2	6.2	267	4.3	2.7	6.0
Broken Kernels	U.S. No. 2	N/A	34	2.8	1.7	4.2	96	3.0	1.0	4.6	43	3.0	2.1	3.9
	U.S. No. 3	N/A	1	3.2	3.2	3.2	--	--	--	--	--	--	--	--
	All lots	N/A	35	2.8	1.7	4.2	96	3.0	1.0	4.6	43	3.0	2.1	3.9
Foreign Material	U.S. No. 2	N/A	273	1.3	0.0	2.3	346	1.2	0.0	10.0	267	1.2	0.0	2.5
	U.S. No. 3	N/A	1	2.7	2.7	2.7	--	--	--	--	--	--	--	--
	All lots	N/A	274	1.3	0.0	2.7	346	1.2	0.0	10.0	267	1.2	0.0	2.5
Dockage	U.S. No. 2	N/A	273	0.2	0.0	0.7	346	0.2	0.0	0.7	267	0.2	0.0	0.7
	U.S. No. 3	N/A	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	All lots	N/A	274	0.2	0.0	0.7	346	0.2	0.0	0.7	267	0.2	0.0	0.7

N/A = Does not apply.
 -- = No lots reported in this category.

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:

- Does not meet the requirements for the grades U.S. No. 1, 2, 3, 4, or 5; or
- 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
- Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
- 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 $5/64 \times 3/4$ slotted-hole sieve and Two-rowed Malting barley that passes through a $5.5/64 \times 3/4$ slotted-hole sieve.

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

Table 16. U.S. Barley Exports: Number of lots and quantity exported by class and grade, 1996-98

Class	Grade	1996		1997		1998	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
Barley	U.S. No. 1	1	7,509	--	--	--	--
	U.S. No. 2	34	615,306	78	1,580,791	24	402,970
	U.S. No. 3	3	81,562	--	--	--	--
	U.S. No. 5	1	4,487	--	--	--	--
	All lots	39	708,864	78	1,580,791	24	402,970
Six-rowed* barley	U.S. No. 1	--	--	1	10,005	--	--
	U.S. No. 2	1	2,191	--	--	--	--
	U.S. No. 3	3	20,768	1	7,648	--	--
	U.S. No. 4	--	--	1	9,241	4	31,321
	All lots	4	22,959	3	26,894	4	31,321
Two-rowed* barley	U.S. No. 1	--	--	2	6,565	1	4,482
	U.S. No. 2	--	--	1	4,120	3	38,111
	U.S. No. 3	3	8,718	1	3,783	--	--
	U.S. No. 4	--	--	--	--	2	8,086
	All lots	3	8,718	4	14,468	6	50,679
All Classes	U.S. No. 1	1	7,509	3	16,570	1	4,482
	U.S. No. 2	35	617,497	79	1,584,911	27	441,081
	U.S. No. 3	9	111,048	2	11,431	--	--
	U.S. No. 4	--	--	1	9,241	6	39,407
	U.S. No. 5	1	4,487	--	--	--	--
	All lots	46	740,541	85	1,622,153	34	484,970

-- = No lots reported in this category.

* = Factor results for Six-Rowed and Two-Rowed barley are available from GIPSA, upon request.

Table 17. Summary of export Barley quality, 1996-98

Factor	Grade	1996					1997				1998			
		Grade Limit	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	47.0	1	52.4	52.4	52.4	--	--	--	--	--	--	--	--
	U.S.No. 2	45.0	34	50.1	46.6	55.4	78	50.7	46.5	55.3	24	52.0	49.7	54.4
	U.S.No. 3	43.0	3	48.4	45.7	49.9	--	--	--	--	--	--	--	--
	U.S.No. 5	40.0	1	42.9	42.9	42.9	--	--	--	--	--	--	--	--
	All lots	N/A	39	49.9	42.9	55.4	78	50.7	46.5	55.3	24	52.0	49.7	54.4
Test Weight (kg/hl)	U.S.No. 1	N/A	1	67.4	67.4	67.4	--	--	--	--	--	--	--	--
	U.S.No. 2	N/A	34	64.5	60.0	71.3	78	65.3	59.9	71.2	24	66.9	64.0	70.1
	U.S.No. 3	N/A	3	62.3	58.8	64.3	--	--	--	--	--	--	--	--
	U.S.No. 5	N/A	1	55.3	55.3	55.3	--	--	--	--	--	--	--	--
	All lots	N/A	39	64.2	55.3	71.3	78	65.3	59.9	71.2	24	66.9	64.0	70.1
Moisture	U.S.No. 1	N/A	1	13.0	13.0	13.0	--	--	--	--	--	--	--	--
	U.S.No. 2	N/A	34	12.2	9.6	14.0	78	12.4	9.8	13.8	24	10.2	8.7	12.6
	U.S.No. 3	N/A	3	12.1	11.3	13.4	--	--	--	--	--	--	--	--
	U.S.No. 5	N/A	1	14.4	14.4	14.4	--	--	--	--	--	--	--	--
	All lots	N/A	39	12.2	9.6	14.4	78	12.4	9.8	13.8	24	10.2	8.7	12.6
Heat-damaged Kernels	U.S.No. 1	0.2	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S.No. 2	0.3	34	0.0	0.0	0.0	78	0.0	0.0	0.0	24	0.0	0.0	0.0
	U.S.No. 3	0.5	3	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S.No. 5	3.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	All lots	N/A	39	0.0	0.0	0.0	78	0.0	0.0	0.0	24	0.0	0.0	0.0
Damaged Kernels (Total)	U.S.No. 1	2.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S.No. 2	4.0	34	1.0	0.0	3.2	78	0.7	0.0	2.8	24	0.4	0.0	1.6
	U.S.No. 3	6.0	3	0.4	0.4	0.6	--	--	--	--	--	--	--	--
	U.S.No. 5	10.0	1	3.3	3.3	3.3	--	--	--	--	--	--	--	--
	All lots	N/A	39	1.0	0.0	3.3	78	0.7	0.0	2.8	24	0.4	0.0	1.6
Foreign Material	U.S.No. 1	1.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S.No. 2	2.0	34	0.1	0.0	0.4	78	0.1	0.0	1.8	24	0.1	0.0	0.2
	U.S.No. 3	3.0	3	0.1	0.1	0.2	--	--	--	--	--	--	--	--
	U.S.No. 5	5.0	1	0.5	0.5	0.5	--	--	--	--	--	--	--	--
	All lots	N/A	39	0.1	0.0	0.5	78	0.1	0.0	1.8	24	0.1	0.0	0.2
Sound Barley	U.S.No. 1	97.0	1	99.6	99.6	99.6	--	--	--	--	--	--	--	--
	U.S.No. 2	94.0	34	96.6	94.8	99.9	78	97.6	94.4	99.4	24	98.1	95.7	99.9
	U.S.No. 3	90.0	3	97.8	97.5	98.5	--	--	--	--	--	--	--	--
	U.S.No. 5	75.0	1	86.6	86.6	86.6	--	--	--	--	--	--	--	--
	All lots	N/A	39	96.7	86.6	99.9	78	97.6	94.4	99.4	24	98.1	95.7	99.9

N/A = Does not apply.

continued

Table 17. Summary of export Barley quality, 1996-98, continued

Factor	Grade	Grade Limit	1996				1997				1998			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Thin Barley	U.S. No. 1	10.0	1	1.7	1.7	1.7	--	--	--	--	--	--	--	--
	U.S. No. 2	15.0	34	6.8	3.5	13.5	78	4.5	0.0	13.2	24	5.5	0.0	10.4
	U.S. No. 3	25.0	3	9.9	9.0	11.8	--	--	--	--	--	--	--	--
	U.S. No. 5	75.0	1	56.3	56.3	56.3	--	--	--	--	--	--	--	--
	All lots	N/A	39	7.4	1.7	56.3	78	4.5	0.0	13.2	24	5.5	0.0	10.4
Broken Kernels	U.S. No. 1	4.0	1	0.2	0.2	0.2	--	--	--	--	--	--	--	--
	U.S. No. 2	8.0	34	0.8	0.0	1.5	78	0.8	0.2	5.2	24	0.7	0.0	1.2
	U.S. No. 3	12.0	3	0.7	0.2	1.0	--	--	--	--	--	--	--	--
	U.S. No. 5	28.0	1	0.7	0.7	0.7	--	--	--	--	--	--	--	--
	All lots	N/A	39	0.8	0.0	1.5	78	0.8	0.2	5.2	24	0.7	0.0	1.2
Dockage	U.S. No. 1	N/A	1	0.4	0.4	0.4	--	--	--	--	--	--	--	--
	U.S. No. 2	N/A	34	1.3	0.4	1.9	78	1.3	0.4	2.8	24	0.9	0.4	1.1
	U.S. No. 3	N/A	3	1.6	0.8	1.9	--	--	--	--	--	--	--	--
	U.S. No. 5	N/A	1	6.2	6.2	6.2	--	--	--	--	--	--	--	--
	All lots	N/A	39	1.3	0.4	6.2	78	1.3	0.4	2.8	24	0.9	0.4	1.1

N/A = Does not apply.

Table 18. Summary of export Six-rowed barley quality, 1996-98

Factor	Grade	1996					1997				1998			
		Grade Limit	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	47.0	--	--	--	--	1	54.2	54.2	54.2	--	--	--	--
	U.S. No. 2	45.0	1	46.3	46.3	46.3	--	--	--	--	--	--	--	--
	U.S. No. 3	43.0	3	53.1	52.5	53.5	1	53.4	53.4	53.4	--	--	--	--
	U.S. No. 4	43.0	--	--	--	--	1	53.6	53.6	53.6	4	53.1	52.9	53.3
	All lots	N/A	4	52.4	46.3	53.5	3	53.8	53.4	54.2	4	53.1	52.9	53.3
Test Weight (kg/hl)	U.S. No. 1	N/A	--	--	--	--	1	69.8	69.8	69.8	--	--	--	--
	U.S. No. 2	N/A	1	59.6	59.6	59.6	--	--	--	--	--	--	--	--
	U.S. No. 3	N/A	3	68.3	67.5	68.9	1	68.8	68.8	68.8	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	1	69.0	69.0	69.0	4	68.4	68.0	68.7
	All lots	N/A	4	67.5	59.6	68.9	3	69.2	68.8	69.8	4	68.4	68.0	68.7
Moisture	U.S. No. 1	N/A	--	--	--	--	1	13.0	13.0	13.0	--	--	--	--
	U.S. No. 2	N/A	1	13.8	13.8	13.8	--	--	--	--	--	--	--	--
	U.S. No. 3	N/A	3	13.0	12.9	13.2	1	13.4	13.4	13.4	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	1	13.1	13.1	13.1	4	12.9	12.4	13.3
	All lots	N/A	4	13.1	12.9	13.8	3	13.1	13.0	13.4	4	12.9	12.4	13.3
Heat-damaged Kernels	U.S. No. 1	0.2	--	--	--	--	1	0.0	0.0	0.0	--	--	--	--
	U.S. No. 2	0.3	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	U.S. No. 3	0.5	3	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	4	0.0	0.0	0.0
	All lots	N/A	4	0.0	0.0	0.0	3	0.0	0.0	0.0	4	0.0	0.0	0.0
Damaged Kernels (Total)	U.S. No. 1	2.0	--	--	--	--	1	0.2	0.2	0.2	--	--	--	--
	U.S. No. 2	4.0	1	0.8	0.8	0.8	--	--	--	--	--	--	--	--
	U.S. No. 3	6.0	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--	--	--
	U.S. No. 4	8.0	--	--	--	--	1	0.0	0.0	0.0	4	0.1	0.0	0.3
	All lots	N/A	4	0.1	0.0	0.8	3	0.1	0.0	0.2	4	0.1	0.0	0.3
Foreign Material	U.S. No. 1	1.0	--	--	--	--	1	0.1	0.1	0.1	--	--	--	--
	U.S. No. 2	2.0	1	0.3	0.3	0.3	--	--	--	--	--	--	--	--
	U.S. No. 3	3.0	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--	--	--
	U.S. No. 4	4.0	--	--	--	--	1	0.0	0.0	0.0	4	0.2	0.0	0.4
	All lots	N/A	4	0.0	0.0	0.3	3	0.0	0.0	0.1	4	0.2	0.0	0.4
Sound Barley	U.S. No. 1	97.0	--	--	--	--	1	99.3	99.3	99.3	--	--	--	--
	U.S. No. 2	94.0	1	98.7	98.7	98.7	--	--	--	--	--	--	--	--
	U.S. No. 3	90.0	3	97.1	90.0	99.7	1	99.6	99.6	99.6	--	--	--	--
	U.S. No. 4	87.0	--	--	--	--	1	99.7	99.7	99.7	4	99.8	99.5	99.9
	All lots	N/A	4	97.3	90.0	99.7	3	99.5	99.3	99.7	4	99.8	99.5	99.9

continued

Table 18. Summary of export Six-rowed barley quality, 1996-98-- Continued

Factor	Grade	Grade Limit	1996				1997				1998			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
Thin Barley	U.S. No. 1	7.0	--	--	--	--	1	0.6	0.6	0.6	--	--	--	--
	U.S. No. 2	10.0	1	8.3	8.3	8.3	--	--	--	--	--	--	--	--
	U.S. No. 3	15.0	3	0.8	0.6	1.0	1	0.8	0.8	0.8	--	--	--	--
	U.S. No. 4	15.0	--	--	--	--	1	0.6	0.6	0.6	4	1.2	0.8	1.6
	All lots	N/A	4	1.5	0.6	8.3	3	0.7	0.6	0.8	4	1.2	0.8	1.6
Broken Kernels	U.S. No. 1	4.0	--	--	--	--	1	0.3	0.3	0.3	--	--	--	--
	U.S. No. 2	8.0	1	0.4	0.4	0.4	--	--	--	--	--	--	--	--
	U.S. No. 3	12.0	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--	--	--
	U.S. No. 4	12.0	--	--	--	--	1	0.0	0.0	0.0	4	0.0	0.0	0.0
	All lots	N/A	4	0.0	0.0	0.4	3	0.1	0.0	0.3	4	0.0	0.0	0.0
Dockage	U.S. No. 1	N/A	--	--	--	--	1	0.2	0.2	0.2	--	--	--	--
	U.S. No. 2	N/A	1	0.6	0.6	0.6	--	--	--	--	--	--	--	--
	U.S. No. 3	N/A	3	0.2	0.1	0.3	1	0.2	0.2	0.2	--	--	--	--
	U.S. No. 4	N/A	--	--	--	--	1	0.2	0.2	0.2	4	0.1	0.1	0.2
	All lots	N/A	4	0.3	0.1	0.6	3	0.2	0.2	0.2	4	0.1	0.1	0.2

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 19. U.S. Sunflower Seed Exports: Number of lots and quantity exported by class and grade, 1996-98

	1996		1997		1998	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S.No. 1	--	--	--	--	16	201,820
U.S.No. 2	--	--	2	29,691	1	14,442
All lots	--	--	2	29,691	17	216,262

-- = No lots reported in this category.

Table 20. Summary of export Sunflower Seed quality, 1996-98

Factor	Grade	1996					1997				1998			
		Grade Limit	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	25.0	--	--	--	--	--	--	--	--	16	30.2	29.8	31.0
	U.S.No. 2	25.0	--	--	--	--	2	30.7	30.6	30.8	1	30.8	30.8	30.8
	All lots	N/A	--	--	--	--	2	30.7	30.6	30.8	17	30.3	29.8	31.0
Test Weight (kg/hl)	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	16	38.9	38.3	39.9
	U.S.No. 2	N/A	--	--	--	--	2	39.5	39.4	39.6	1	39.7	39.7	39.7
	All lots	N/A	--	--	--	--	2	39.5	39.4	39.6	17	39.0	38.3	39.9
Moisture	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	16	9.0	8.2	10.0
	U.S.No. 2	N/A	--	--	--	--	2	9.0	8.9	9.2	1	8.5	8.5	8.5
	All lots	N/A	--	--	--	--	2	9.0	8.9	9.2	17	8.9	8.2	10.0
Heat-damaged Sunflower Seed	U.S.No. 1	0.5	--	--	--	--	--	--	--	--	16	0.0	0.0	0.1
	U.S.No. 2	1.0	--	--	--	--	2	0.0	0.0	0.0	1	0.0	0.0	0.0
	All lots	N/A	--	--	--	--	2	0.0	0.0	0.0	17	0.0	0.0	0.1
Damaged Sunflower Seed (Total)	U.S.No. 1	5.0	--	--	--	--	--	--	--	--	16	0.4	0.0	1.2
	U.S.No. 2	10.0	--	--	--	--	2	0.0	0.0	0.0	1	0.2	0.2	0.2
	All lots	N/A	--	--	--	--	2	0.0	0.0	0.0	17	0.4	0.0	1.2
Foreign Material	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	16	3.3	0.0	4.6
	U.S.No. 2	N/A	--	--	--	--	2	3.3	3.0	3.6	1	3.9	3.9	3.9
	All lots	N/A	--	--	--	--	2	3.3	3.0	3.6	17	3.4	0.0	4.6
Dehulled Seed	U.S.No. 1	5.0	--	--	--	--	--	--	--	--	16	0.8	0.5	1.3
	U.S.No. 2	5.0	--	--	--	--	2	8.5	8.0	9.0	1	1.0	1.0	1.0
	All lots	N/A	--	--	--	--	2	8.5	8.0	9.0	17	0.8	0.5	1.3
Admixture	U.S.No. 1	N/A	--	--	--	--	--	--	--	--	16	3.2	2.8	3.8
	U.S.No. 2	N/A	--	--	--	--	2	25.6	23.0	28.0	1	3.3	3.3	3.3
	All lots	N/A	--	--	--	--	2	25.6	23.0	28.0	17	3.2	2.8	3.8

N/A = Does not apply.

-- = No lots reported in this category.

Oats

Oat Grades and Grade Requirements

There are no classes or subclasses in oats. Oats are divided into four numerical grades and U.S. Sample grade. Special grades are provided to emphasize special qualities or

conditions affecting the value of the oats and are added to and made a part of the grade designation. Special grades do not affect the numerical or Sample grade designation.

U.S. Standards for Oats

Grade	Minimum limits of -		Maximum limits of -		
	Test weight per bushel (pounds)	Sound Oats (percent)	Heat damaged kernels (percent)	Foreign material (percent)	Wild Oats (percent)
U.S. No. 1	36.0	97.0	0.1	2.0	2.0
U.S. No. 2	33.0	94.0	0.3	3.0	3.0
U.S. No. 3 ¹	30.0	90.0	1.0	4.0	5.0
U.S. No. 4 ²	27.0	80.0	3.0	5.0	10.0
U.S. Sample grade					

U.S. Sample grade are oats which:

- (a) Do not meet the requirements for the grades U.S. Nos. 1, 2, 3, or 4; or
- (b) Contain 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 foreign substance(s), 8 or more cocklebur (*Xanthium* spp.) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or an equivalent quantity of other animal filth per 1-1/8 to 1-1/4 quarts of oats; or
- (c) Have a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
- (d) Are heating or otherwise of distinctly low quality.

1 Oats that are slightly weathered shall be graded not higher than U.S. No. 3.

2 Oats that are badly stained or materially weathered shall be graded not higher than U.S. No. 4.

Oats

Definitions

Test weight (lb/bu) is pounds of grain per Winchester bushel as determined using an approved device.

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 oat kernels, other grains, and wild oats that are materially discolored and damaged by heat.

Foreign material is all matter other than oats, wild oats, and other grains.

Fine seeds are all matter that passes through a 5/64 triangular-hole sieve.

Sound oats are kernels and pieces of oat kernels (except wild oats) that are not badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

Wild oats are seeds of *Avena fatua* L. and *A. sterilis* L.

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.

Table 21. U.S. Oats Exports: Number of lots and quantity exported by class and grade, 1996-98

Class	1996		1997		1998	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S.No. 2	1	4,563	--	--	--	--
U.S.No. 3	--	--	--	--	--	--
All lots	1	4,563	--	--	--	--

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 22. U.S. Canola Exports: Number of lots and quantity exported by class and grade, 1996-98

	1996		1997		1998	
	Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
U.S.No. 1	6	52,730	2	25,064	11	105,095
U.S.No. 3	--	--	--	--	1	10,500
All lots	6	52,730	2	25,064	12	115,595

-- = No lots reported in this category.

Table 23. Summary of export Canola quality, 1996-98

Factor	Grade	Grade Limit	1996				1997				1998			
			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	5	3.8	1.2	7.6	2	4.2	2.1	6.3	11	4.1	1.7	6.8
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	1	4.4	4.4	4.4
	All lots	N/A	5	3.8	1.2	7.6	2	4.2	2.1	6.3	12	4.1	1.7	6.8
Moisture	U.S. No. 1	N/A	5	6.6	5.3	8.5	2	7.3	6.6	8.0	10	7.2	5.5	12.0
	U.S. No. 3	N/A	--	--	--	--	--	--	--	--	1	7.0	7.0	7.0
	All lots	N/A	5	6.6	5.3	8.5	2	7.3	6.6	8.0	11	7.2	5.5	12.0
Heat damaged Kernels	U.S. No. 1	0.1	6	0.0	0.0	0.0	2	0.0	0.0	0.0	11	0.0	0.0	0.0
	U.S. No. 3	2.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	All lots	N/A	6	0.0	0.0	0.0	2	0.0	0.0	0.0	12	0.0	0.0	0.0
Distinctly green kernels	U.S. No. 1	2.0	6	0.6	0.0	1.6	2	1.0	0.5	1.5	11	0.7	0.0	1.4
	U.S. No. 3	20.0	--	--	--	--	--	--	--	--	1	1.0	1.0	1.0
	All lots	N/A	6	0.6	0.0	1.6	2	1.0	0.5	1.5	12	0.8	0.0	1.4
Total damaged kernels	U.S. No. 1	3.0	6	1.0	0.0	2.0	2	1.1	0.5	1.7	11	0.9	0.1	1.8
	U.S. No. 3	20.0	--	--	--	--	--	--	--	--	1	1.2	1.2	1.2
	All lots	N/A	6	1.0	0.0	2.0	2	1.1	0.5	1.7	12	0.9	0.1	1.8
Ergot	U.S. No. 1	0.05	6	0.0	0.0	0.0	2	0.0	0.0	0.0	11	0.0	0.0	0.0
	U.S. No. 3	0.05	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	All lots	N/A	6	0.0	0.0	0.0	2	0.0	0.0	0.0	12	0.0	0.0	0.0
Sclerotinia	U.S. No. 1	0.05	6	0.0	0.0	0.0	2	0.0	0.0	0.0	11	0.0	0.0	0.0
	U.S. No. 3	0.15	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	All lots	N/A	6	0.0	0.0	0.0	2	0.0	0.0	0.0	12	0.0	0.0	0.0
Stones	U.S. No. 1	0.05	6	0.0	0.0	0.0	2	0.0	0.0	0.0	11	0.0	0.0	0.0
	U.S. No. 3	0.05	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	All lots	N/A	6	0.0	0.0	0.0	2	0.0	0.0	0.0	12	0.0	0.0	0.0
Total conspicuous admixture	U.S. No. 1	1.0	6	0.2	0.0	0.5	2	0.4	0.3	0.4	11	0.4	0.0	0.7
	U.S. No. 3	2.0	--	--	--	--	--	--	--	--	1	0.4	0.4	0.4
	All lots	N/A	6	0.2	0.0	0.5	2	0.4	0.3	0.4	12	0.4	0.0	0.7
Inconspicuous admixture	U.S. No. 1	5.0	6	0.0	0.0	0.0	2	0.0	0.0	0.0	11	0.1	0.0	0.4
	U.S. No. 3	5.0	--	--	--	--	--	--	--	--	1	1.7	1.7	1.7
	All lots	N/A	6	0.0	0.0	0.0	2	0.0	0.0	0.0	12	0.2	0.0	1.7

N/A = Does not apply.
 -- = No lots reported in this category.

Index of Tables

Table 1	U.S. Wheat Exports: Number of lots and quantity exported by class and grade, 1996-98.	5	Table 12	U.S. Soybean Exports: Number of lots and quantity exported by class and grade, 1996-98.	29
Table 2	Summary of export Hard Red Winter wheat quality, 1996-98.	6	Table 13	Summary of export Soybean quality, 1996-98.	30
Table 3	Summary of export Hard Red Spring wheat quality, 1996-98.	9	Table 14	U.S. Sorghum Exports: Number of lots and quantity exported by class and grade, 1996-98.	33
Table 4	Summary of export Soft Red Winter wheat quality, factor averages by grade, 1996-98.	12	Table 15	Summary of export Sorghum quality, 1996-98.	34
Table 5	Summary of export Durum wheat quality, factor averages by grade, 1996-98.	14	Table 16	U.S. Barley Exports: Number of lots and quantity exported by class and grade, 1996-98.	38
Table 6	Summary of export Soft White wheat quality, factor averages by grade, 1996-98.	16	Table 17	Summary of export Barley quality.	39
Table 7	Summary of export Hard White wheat quality, 1996-98.	18	Table 18	Summary of export Six-rowed barley quality, 1996-98.	41
Table 8	Summary of export Mixed wheat quality, 1996-98.	19	Table 19	U.S. Sunflower Seed Exports: Number of lots and quantity exported by class and grade, 1996-98.	44
Table 9	U.S. Corn Exports: Number of lots and quantity exported by class and grade, 1996-98.	23	Table 20	Summary of export Sunflower Seed quality, 1996-98.	44
Table 10	Summary of export Yellow corn quality, 1996-98.	24	Table 21	U.S. Oats Exports: Number of lots and quantity exported by class and grade, 1996-98.	46
Table 11	Summary of export White corn quality, 1996-98.	26	Table 22	U.S. Canola Exports: Number of lots and quantity exported by class and grade, 1995-1997.	48
			Table 23	Summary of export Canola quality, 1996-98.	49

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.