

EXPORTING GRAIN PANEL



EXPORT SORGHUM

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**GRAIN INSPECTION, PACKERS AND STOCKYARDS
ADMINISTRATION**

MAY 21, 2014



United States Department of Agriculture

Who is GIPSA?



The Grain Inspection, Packers and Stockyards Administration (GIPSA) facilitates the marketing of livestock, poultry, meat, cereals, oilseeds, and related agricultural products, and promotes fair and competitive trading practices for the overall benefit of consumers and American agriculture.



Federal Grain Inspection Service



- Facilitate the marketing of grain, oilseeds, rice, and related agricultural products
- Establish official U.S. standards for grain, oilseeds, and rice
- Develop sampling and testing methods
- Manage the National Inspection System
 - **Federal**
 - **State**
 - **Private Laboratories**

FGIS Does Not:



- Market grain
- Mandate quality
- Set grain prices
- Arbitrate disputes

Federal Grain Inspection Service



The United States Grain Standards Act (USGSA) of 1916.

- Weighing and inspection of exported grain is mandatory with the exception of grain moving by rail to Mexico and Canada
- Domestic inspection and weighing is permissive (voluntary)
- Official weighing and inspection of grain provides assurance to the buyer/importer that they receive the quantity and quality of grain specified in the contract.

How FGIS Adds Value



Stowage Examinations

- Helps ensure grain maintains quality in transit

Sampling

- Independent representative assessment of the entire contents of a carrier

Inspection

- Provides accurate, consistent information to fulfill contract requirements

Weighing

- Verification of exact quantity

Certification

- Facilitate transactions – know what you're buying; know what you're selling

Federal Grain Inspection Service



The Export Inspection Certificate is the end result of the inspection process. Certificates report:

- Grade and grading factors
- Non grade factors such as moisture, protein, etc.
- Official procedures followed, location where inspection or weighing occurred
- Carrier name and stowage exam information

Export Inspection Certificate



Buyers trust the certificate and the integrity of the official inspection system supporting it.

Official U.S. Inspection Certificates:

- Only issued by FGIS-authorized labs
- Issued under authority of U.S. Grain Standards Act
- Receivable by all courts of the United States as *prima facie* evidence

U.S. SORGHUM EXPORTS (Thousand Metric Tons)



09/10	10/11	11/12	12/13	13/14 (Mar*)	13/14 (Apr**)
4,032	3,827	1,549	2,128	4,000	4,700

Source: Foreign Agriculture Service. Grain: World Markets and Trade. April, 2014
Trade Years shown.

*Projection from March 2014 report

**Projection from April 2014 report

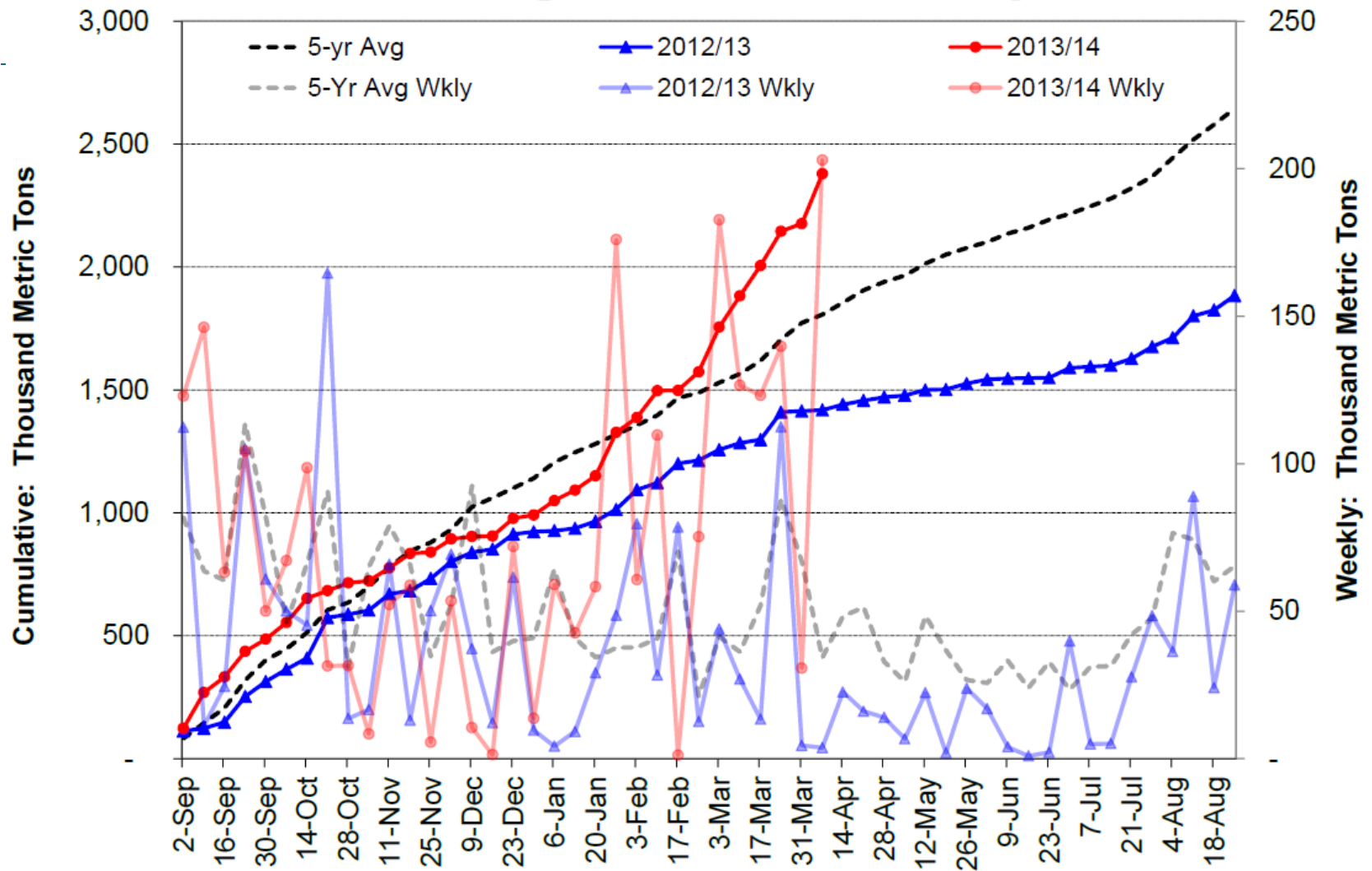
LARGEST U.S. SORGHUM CUSTOMERS



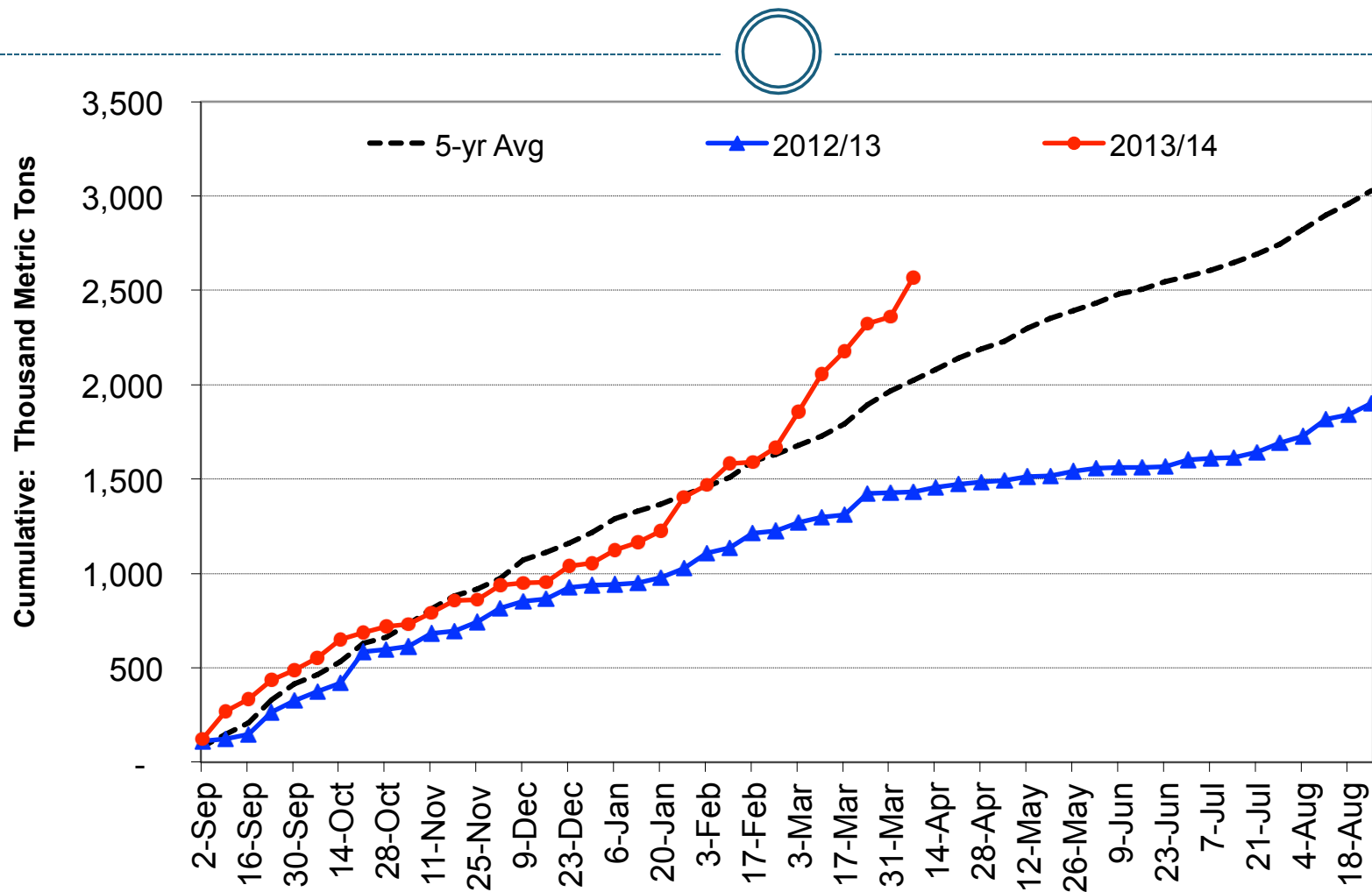
- China
- Mexico
- Japan
- Sub-Saharan Africa

Source: Economic Research Service: Feed Grains Yearbook Tables

Sorghum - FGIS Only



EXPORT: SORGHUM-FGIS, STATES, & AGENCIES



SORGHUM INSPECTED FOR EXPORT BY REGION



EXPORT SORGHUM INSPECTION (THOUSAND METRIC TONS) CUMULATIVE TO-DATE VALUES

INTERIOR	FY 2014	96
	CHANGE FROM FY 2013	93
LEAGUE CITY	FY 2014	1,688
	CHANGE FROM FY 2013	925
NOLA	FY 2014	459
	CHANGE FROM FY 2013	88
OLYMPIA	FY 2014	142
	CHANGE FROM FY 2013	142
TOLEDO	FY 2014	14
	CHANGE FROM FY 2013	14
TOTAL	FY 2014	2,399
	CHANGE FROM FY 2013	1,262

EXPORT LOAD ORDERS



ABC Grain, Incorporated
Houston, Texas

Deliver to: M/V Sorghum Example

Approx. 60,000 MT

Destination: CHINA

Grade and Grain:

U.S. No. 2 Or Better Sorghum

Max Moisture 14.0%

Max 6.0% BNFM, Max 2.0% FM

Max 20 ppb aflatoxin

Max 0.3% tannin

Phyto cert required

FGIS "No water" statement

Provide (7) seven – (5) five-pound composite samples

FGIS to witness fumigation

Fumigator to use fumi-sleeves (for dust retention), sub-surface application

EXPORT LOAD ORDERS



<u>Carrier</u>	<u>Lot Size</u>	<u>Minimum Number of Sublots</u>	<u>Maximum Size of Each Sublot</u>
Vessels	100,000 bushels or less	1	-----
	100,000 to 200,000 bushels	2	100,000 bushels
	Over 200,000 bushels	3	100,000 bushels <u>1/</u>
Unit Trains	Less than 200,000 bushels (Less than 50 cars)	2	5 cars
	200,000 bushels or more (50 cars or more)	5	10 cars
<u>1/</u> 200,000 bushels when component sample analysis is requested on one or more factors.			

EXPORT LOAD ORDERS



Most load orders call for U.S. No. 2 Or Better Sorghum

Some loaded under “Average Quality”

Most request aflatoxin testing; some requests for zearalenone testing

Fumigation

- not always full circulation
- sometimes subsurface with (and sometimes without) fumi-sleeves
- typically witnessed by FGIS
- exporter needs phytosanitary certificate

Exporters typically request several 5-pound sealed composite samples

FGIS “no water” clause

EXPORTING GRAIN PANEL



GRADING SORGHUM

BRIAN ADAM, BOARD OF APPEALS AND REVIEW

**GRAIN INSPECTION, PACKERS AND STOCKYARDS
ADMINISTRATION**

MAY 21, 2014



United States Department of Agriculture

SORGHUM GRADING



Sorghum standards in the Code of Federal Regulations:
7 CFR 810.1401-810.1405

The sorghum standards last amended in July 2007 with
an effective date of June 1, 2008.

Procedures for grading sorghum are found in Grain
Inspection Handbook- Book II Grain Grading Procedures,
Chapter 9

Classes of Sorghum



Sorghum: Sorghum which lacks a pigmented testa (subcoat) and contains less than 98.0 percent White sorghum and not more than 3.0 percent Tannin sorghum. The pericarp color of this class may appear white, yellow, red, pink, orange or bronze.

White: Sorghum which lacks a pigmented testa (subcoat) and contains not less than 98.0 percent kernels with a white pericarp, and contains not more than 2.0 percent of sorghum of other classes. This class includes sorghum containing spots that, singly or in combination, cover 25.0 percent or less of the kernel.

Tannin: Sorghum which has a pigmented testa (subcoat) and contains not more than 10 percent of kernels without a pigmented testa.

Mixed: Sorghum which does not meet the requirements for any of the classes Sorghum, Tannin sorghum, or White sorghum.

Quality Factors Determined During Inspection



- Test Weight
- Moisture
- Odor
- Class
- Damage
- Heat Damage
- Foreign material
- Broken kernels and foreign material
- Sample grade criteria (stones, glass, toxic seed, etc.)

Determinations and Portion Sizes



- Determinations made before the removal of dockage:
 - Test weight (1000 to 1050 grams)
 - Moisture (650 grams)
 - Odor determination (1000 grams)
 - Kind of Grain (30 grams)

Determinations and Portion Sizes



- Determination made after the removal of dockage:
 - Mechanically separated broken kernels (1000 grams)
 - Handpicked foreign material (30 grams)
 - Class (15 grams)
 - Damage kernels (15 grams)
 - Heat-damage kernels (30 grams)
 - Stones (1000 grams)
 - Odor determination (1000 grams)

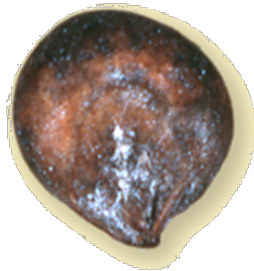
Types of Damages in Sorghum



Germ



Mold



Internal mold



Insect



Heat



Sprout



Sorghum Grades



- After all factors are determined a grade can be assigned
- Inspectors refer to FGIS' sorghum grading chart for minimum and maximum limits in applying a grade
- Issuance of a FGIS certificate completes the inspection process

SORGHUM GRADES & REQUIREMENTS

§810.1404 Grades and grade requirements for sorghum.

Grading factors	Grades U.S. Nos. ¹			
	1	2	3	4
Minimum pound limits of				
Test weight per bushel	57.0	55.0	53.0	51.0
Maximum percent limits of				
Damaged kernels:				
Heat (part of total)	0.2	0.5	1.0	3.0
Total	2.0	5.0	10.0	15.0
Broken kernels and foreign material:				
Foreign material (part of total)	1.0	2.0	3.0	4.0
Total	3.0	6.0	8.0	10.0
Maximum count limits of				
Other material:				
Animal filth	9	9	9	9
Castor beans	1	1	1	1
Crotalaria seeds	2	2	2	2
Glass	1	1	1	1
Stones ²	7	7	7	7
Unknown foreign substance	3	3	3	3
Cockleburs	7	7	7	7
Total ³	10	10	10	10
U.S. Sample grade is sorghum that:				
(a) Does not meet the requirements for U.S. Nos. 1, 2, 3, or 4; or				
(b) Has a musty, sour, or commercially objectionable foreign odor (except smut odor); or				
(c) Is badly weathered, heating, or distinctly low quality.				

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

²Aggregate weight of stones must also exceed 0.2 percent of the sample weight.

³Includes any combination of animal filth, castor beans, crotalaria seeds, glass, stones, unknown foreign substance or cockleburs.

SORGHUM GRADING: BASIS OF DETERMINATION



BASIS OF DETERMINATION

Lot as a Whole	Factors Determined Before the Removal of Dockage	Factors Determined After the Removal of Dockage	Factors Determined After the Removal of Dockage, Broken Kernels, and Foreign Material Removed by the 5/64 sieve
Distinctly low quality Heating Infested Odor	Distinctly low quality General appearance Infested Kind of grain Moisture Odor Smut Test weight U.S. Sample Grade factors	Broken kernels and foreign material	Class Damaged kernels Heat-damaged kernels Odor Stones

SORGHUM GRADING: ODOR



ODOR CLASSIFICATION EXAMPLES

Sour	Musty	Commercially Objectionable Foreign Odors
Boot Fermenting Insect (acrid) Pigpen	Ground Insect Moldy	Animal hides Decaying animal and vegetable matter Fertilizer Fumigant Insecticide Oil products Skunk Smoke Strong weed

Federal Grain Inspection Service



THANK YOU!

www.gipsa.usda.gov



United States Department of Agriculture