



Summary of the U.S. Grains Council's 2015/2016 Sorghum Harvest & Export Cargo Quality Report

In February 2016, the U.S. Grains Council released its first annual *Sorghum Harvest & Export Cargo Quality Report*. This report showed that the 2015 early and late harvest samples were, on average, very good, with 94 percent grading U.S. No. 2 or better. This high quality was largely the result of favorable sorghum growing and harvest conditions, which also enabled high yields. The report showed the following key characteristics:

Harvest Grade Factors and Moisture

- Average test weight of 58.9 pounds per bushel (75.9 kilograms per hectoliter), with 97 percent of the samples within the range for U.S. No. 2 grade sorghum.
- Low levels of broken kernels and foreign material (BNFM) (average of 1.7 percent), with 91 percent of the samples within the range for U.S. No. 1 grade.
- The samples had an average foreign material of 0.6 percent, which is within the range for U.S. No. 1 grade, indicating little cleaning will be required.
- The samples showed low levels of total damage (average of 0.1 percent), with 99 percent within the range for U.S. No. 1 grade.
- There was no observed heat damage, which was expected for farm-originated samples.
- The average moisture at the elevator was 14.1 percent for the samples, which is near optimum for harvest moisture.

Harvest Chemical Composition

- The samples had an average protein concentration of 10.9 percent (dry basis), which is within the range of typical protein concentration values for U.S. sorghum hybrids.
- There was an average starch concentration of 73.2 percent (dry basis) found in the samples, which is a typical level for sorghum.
- The samples had an average oil concentration of 4.5 percent (dry basis), which is within the range of typical oil concentration values for U.S. sorghum hybrids.
- There was no detected levels of tannins found within the samples.

Harvest Physical Factors

- The samples had an average kernel diameter of 2.53 millimeters and average 1,000-kernal weight (TKW) of 26.30 grams, which are typical values for sorghum.
- There was an average kernel true density of 1.359 grams per cubic centimeter for the samples, which is within the range for feed sorghum.
- The samples had an average kernel hardness index of 71.0, which is a typical value for commercial sorghum samples.

Harvest Mycotoxins

- 100 percent of the 2015 sorghum harvest samples tested below the U.S. Food and Drug Administration (FDA) mycotoxin action level of 20 parts per billion.
- 100 percent of the sorghum harvest samples tested below the U.S. FDA advisory levels for DON (5 parts per million for hogs and other animals; 10 parts per million for chicken and cattle).

The 2015/2016 export samples were, on average, very good, with 98 percent grading U.S. No. 2 or better. Notable quality attributes found in the Council's *2015/2016 Sorghum Harvest & Export Cargo Quality Report* include:

Export Cargo Grade Factors and Moisture

- The samples had an average test weight of 59.0 pounds per bushel (76.0 kilograms per hectoliter), with 100 percent of the samples within the range for U.S. No. 2 grade sorghum.
- Low levels of broken kernels and foreign material (BNFM) (average of 1.9 percent) were found in the samples, with 96.2 percent within the range for U.S. No. 1 grade.
- Average foreign material of 0.9 percent was found in the samples, with 98.3 percent within the range for U.S. No. 1 grade.
- Low levels of total damage (average of 0.5 percent) were found in the samples, with 99.5 percent within the range for U.S. No. 1 grade.
- There was no observed heat damage in the samples.
- The samples had an average moisture of 13.8 percent, which is an acceptable level for safe storage.

Export Cargo Chemical Composition

- The samples had an average protein concentration of 10.8 percent (dry basis), which is in the normal range of typical protein concentration for U.S. sorghum hybrids.
- There was an average starch concentration of 73.0 percent (dry basis) for the samples, which is a typical level for sorghum.
- The samples had an average oil concentration of 4.5 percent (dry basis), which is within the normal range of typical oil concentration values for U.S. sorghum hybrids.
- There were no detected levels of tannins in the samples.

Export Cargo Physical Factors

- Average kernel diameter of 2.60 millimeters and average 1,000-kernal weight (TKW) of 27.57 grams, typical values for U.S. sorghum hybrids.
- Average kernel volume of 20.28 cubic millimeters, a value on the lower end of typical values.
- Average kernel true density of 1.360 grams per cubic centimeter, which is within the range of feed sorghum.
- Average kernel hardness index of 71.3, which is a typical value for sorghum samples.

Export Cargo Mycotoxins

- 100 percent of the 2015/2016 sorghum export samples tested below the U.S. Food and Drug Administration (FDA) mycotoxin action level of 20 parts per billion.
- 100 percent of the 2015/2016 sorghum export samples tested below the FDA advisory levels for DON (5 parts per million for hogs and other animals; 10 parts per million for chicken and cattle).

View the Full Report Online

The full report provides more details on these characteristics and the tests used to assess them. Please visit www.grains.org to view the report in its entirety.

More About the Grains Council

The U.S. Grains Council is a private, non-profit partnership of farmers and agribusinesses committed to building and expanding international markets for U.S. sorghum, barley, corn and their co-products including ethanol. The Council is headquartered in Washington, D.C., and has 10 international offices that oversee programs in more than 50 countries.