

Summary of the U.S. Grains Council 2017/2018 Corn Export Cargo Quality Report

In March 2018, the U.S. Grains Council released its seventh annual *Corn Export Cargo Quality Report*. This report showed that the aggregate averages for the 2017/2018 export cargo samples were rated at U.S. grade No. 2 or better on all grade attributes. Notable U.S. Aggregate quality attributes found in the survey include:

EXPORT CARGO GRADE FACTORS AND MOISTURE

- Same average test weight (57.4 pounds per bushel or 73.9 kilograms per hectoliter) to 2016/2017. About 84 percent of the samples were at or above the limit for U.S. No. 1 grade corn, indicating overall good quality.
- Same average broken corn and foreign material (BCFM) (2.9 percent) as 2016/ 2017 and 5YA¹, slightly below the limit for U.S. No. 2 grade. BCFM predictably increased, from 0.8 percent to 2.9 percent, as the crop moved from harvest through the market channel to export.
- Lower average **total damage** (1.9 percent) than 2016/2017. The majority (98.1 percent) of the samples were below the limit for U.S. No. 2 grade.
- Negligible observed **heat damage**, indicating good management of drying and storage of corn throughout the market channel.
- Slightly higher average **moisture** (14.4 percent) than 2016/2017, but the same as 5YA.

EXPORT CARGO CHEMICAL COMPOSITION

- Same average protein concentration (8.6 percent dry basis) as 2016/2017 and 5YA.
- Slightly lower average starch concentration (72.1 percent dry basis) than 2016/2017 and lower than 5YA.
- Higher average **oil** concentration (4.1 percent dry basis) than 2016/2017 and 5YA.

EXPORT CARGO PHYSICAL FACTORS

- Higher average stress cracks (9 percent) than 2016/2017, but slightly lower than 5YA. The majority of export samples (84.0%) had less than 15% stress cracks.
- Higher average stress crack index (22.4) than 2016/2017, but slightly lower than 5YA. The higher SCI and stress crack percentages in 2017/2018 than in 2016/2017 may be due, in part, to higher average moisture at harvest.
- Higher average **100-kernel weight** (36.07 grams) than 2016/2017 and 5YA, indicating larger kernels in 2017/2018 than last year and 5YA.
- Higher average **kernel volume** (0.28 cubic centimeters) than 2016/2017 and 5YA.
- Slightly higher average kernel **true density** (1.287 grams per cubic centimeter) than 2016/2017, yet similar to 5YA.
- Lower average percent of whole kernels (84.4 percent) than 2016/2017 and 5YA.
- Higher average horneous (hard) endosperm (81 percent) than 2016/2017, but slightly lower than 5YA.

EXPORT CARGO MYCOTOXINS

- All the export samples tested below the U.S. Food and Drug Administration (FDA) action level (20 parts per billion) for **aflatoxins**. A higher proportion of the samples had no detectable levels of aflatoxins than in 2016/2017.
- All the export samples tested below the 5 ppm FDA advisory level for deoxynivalenol (**DON**) or vomitoxin. A higher proportion of the samples had no detectable levels of DON than in 2016/2017.

¹5YA represents the simple average of the previous five years of the quality factor's average from the 2012/2013, 2013/2014, 2014/2015, 2015/2016 and 2016/2017 Corn Export Cargo Quality Reports.



http://www.grains.org Phone: 202-789-0789 Fax: 202-898-0522 20 F Street NW, Suite 600, Washington, D.C. 20001

VIEW THE FULL REPORT ONLINE IN EARLY APRIL

The full report will provide details on these characteristics and the tests used to assess them. Please visit *www.grains.org* in early April to view the report in its entirety.

ABOUT THE U.S. 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.