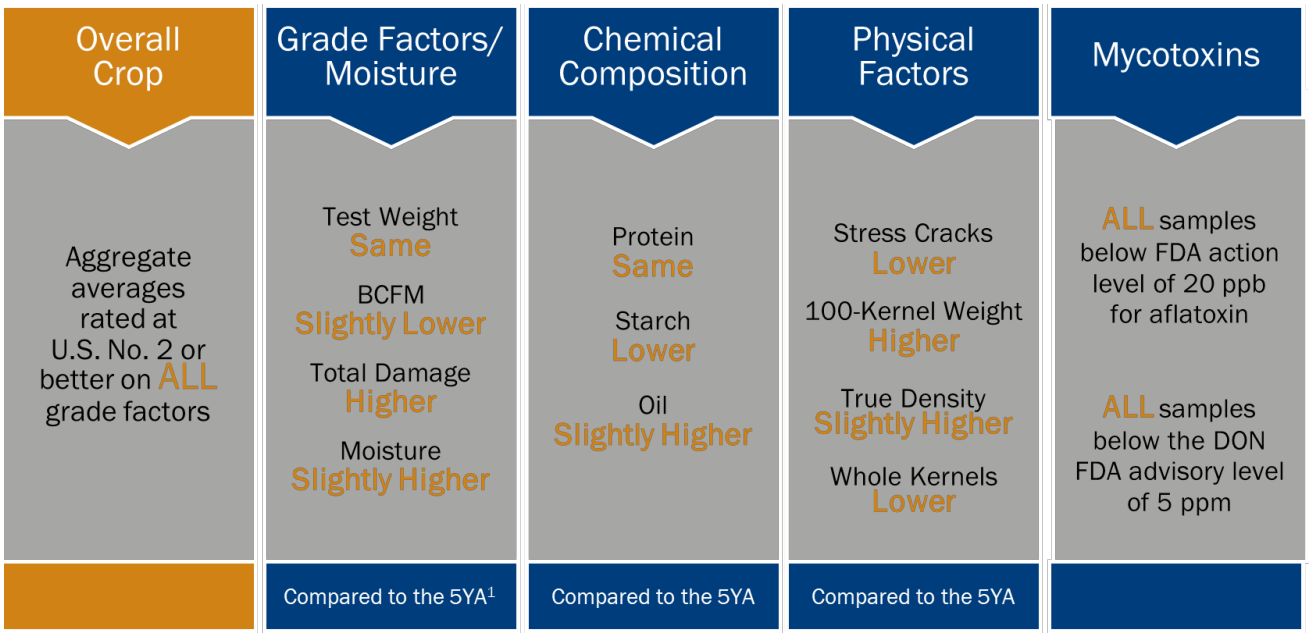
U.S. GRAINS COUNCIL

Summary of the U.S. Grains Council *2018/2019 Corn Export Cargo Quality Report*

In April 2019, the U.S. Grains Council released its eighth annual *Corn Export Cargo Quality Report*. This report reflects the test results of the 436 export cargo samples and indicates that the aggregate averages for the 2018/2019 export cargo samples rated at U.S. grade No. 2 or better on all grade factors. Notable U.S. Aggregate quality attributes found in the survey are discussed by this summary and displayed in the infographic below:



Export Cargo Grade Factors and Moisture

- Same average **test weight** (57.4 pounds per bushel or 73.9 kilograms per hectoliter) as 2017/2018. Approximately 84.4 percent of 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%) as 2017/2018 and slightly lower than the 5YA and the maximum limit for U.S. No. 2 grade (3.0 percent). BCFM predictably increased from 0.7 to 2.9%, as the crop moved from harvest through the transport process to export.
- Higher average **total damage** (2.6 percent) than 2017/2018 (1.9 percent). The majority (94.7 percent) of the samples were within the limit for U.S. No. 2 grade.
- Negligible observed **heat damage**, indicating good management of drying and storage of corn throughout the marketing channel.
- Slightly higher average **moisture** (14.5 percent) than 2017/2018 and the 5YA (both 14.4 percent).

Export Cargo Chemical Composition

- Slightly lower average **protein** concentration (8.5 percent dry basis) than 2017/2018 (8.6 percent dry basis) but same as the 5YA.
- Slightly higher average **starch** concentration (72.3 percent dry basis) than 2017/2018 (72.1 percent dry basis) but lower than the 5YA (73.2 percent dry basis).
- Slightly lower average **oil** concentration (4.0 percent dry basis) than 2017/2018 but slightly higher than the 5YA (4.1 and 3.9 percent dry basis, respectively).

[1]5YA represents the simple average of the previous five years of the quality factor's average from the *2013/2014, 2014/2015, 2015/2016, 2016/2017 and 2017/2018 Corn Export Cargo Quality Reports*.

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Summary of the U.S. Grains Council
2018/2019 Corn Export Cargo Quality Report (Continued)

EXPORT CARGO PHYSICAL FACTORS

- Lower average **stress cracks** (7 percent) than 2017/2018 (9 percent) and the 5YA (10 percent). The majority of export samples (88.5%) had less than 15% stress cracks.
- Lower average **stress crack index** (16.2) than 2017/2018 (22.4) and the 5YA (25.1). This year's lower stress crack index and stress crack percentages compared to 2017/2018 and the 5YA may be due, in part, to lower average moisture at harvest.
- Higher average **100-kernel weight** (36.17 grams) than 2017/2018 (36.07 grams) and the 5YA (35.42 grams), indicating heavier kernels in 2018/2019 than last year and the 5YA.
- Same average **kernel volume** (0.28 cubic centimeters) as 2017/2018 and the 5YA.
- Slightly higher average kernel **true density** (1.288 grams per cubic centimeter) than 2017/2018 and the 5YA (1.287 and 1.286 grams per cubic centimeter, respectively).
- Higher average percent of **whole kernels** (85.2 percent) than 2017/2018 (84.4 percent) but lower than the 5YA (87.8 percent).
- Higher average **horneous endosperm** (82 percent) than 2017/2018 and the 5YA (both 81 percent).

EXPORT CARGO MYCOTOXINS

- All of the export samples tested below the U.S. Food and Drug Administration (FDA) action level (20 parts per billion) for **aflatoxins**. The proportion of samples with no detectable levels of aflatoxins was 95.9 percent, slightly higher than in the 2017/2018 samples (93.3 percent).
- All of the export samples tested below the 5 parts per million FDA advisory level for deoxynivalenol (**DON or Vomitoxin**). The proportion of samples with no detectable levels of DON was 85.6 percent, slightly lower than in last year's samples (88.6 percent).

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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 14 international offices that oversee programs in more than 50 countries.