

In December 2017, the U.S. Grains Council released its seventh annual Corn Harvest Quality Report. This report showed that 95.1 percent of U.S. corn samples were rated at U.S. grade No. 2 or better. The good quality was largely the result of a corn growing season with an extended planting period; a warm, wet vegetative period; a cool, dry, and prolonged grain-filling period; and a warm, wet, and slow harvest. The report showed that the 2017 U.S. corn crop entered the market channels with the following key characteristics:

HARVEST GRADE FACTORS AND MOISTURE

- Average test weight of 58.4 pounds per bushel (75.2 kilograms per hectoliter), with 92.2 percent above the limit for U.S. No. 1 grade corn. Higher than 5YA¹, this test weight indicates good kernel filling and maturation.
 - Average broken corn and foreign material of 0.8 percent, with 94.7 percent below the limit for U.S. No. 1 grade.
 - Average broken corn of 0.6 percent and average foreign material of 0.2 percent, both higher than 2016 but same as 5YA.
 - Average total damage of 1.3 percent, lower than 2016, 2015, and 5YA.
 - No observed heat damage.
 - Average elevator moisture of 16.6 percent, which indicates slightly more samples required drying than in 2016 and 2015.
- Average 100-kernel weight of 36.07 grams, higher than 2016, 2015, and 5YA, signifying larger kernels than in previous years.
 - Average kernel volume of 0.29 cubic centimeters, higher than 2016, 2015, and 5YA.
 - Kernel true density, on average, was 1.260 grams per cubic centimeter, slightly higher than 2016 and 2015, but similar to 5YA.
 - Average whole kernel percentage of 89.9 percent, lower than 2016, 2015, and 5YA.
 - Average percentage of horneous (hard) endosperm of 81 percent, higher than 2016 and 2015, but slightly lower than 5YA.

HARVEST CHEMICAL COMPOSITION

- Average protein concentration of 8.6 percent (dry basis), same as 2016 but higher than 2015.
- Average starch concentration of 72.3 percent (dry basis), lower than 2016, 2015, and 5YA.
- Average oil concentration of 4.1 percent (dry basis), higher than 2016, 2015, and 5YA.

HARVEST PHYSICAL FACTORS

- Average stress cracks of 5 percent, slightly higher than 2016, but lower than 5YA. Average stress crack index of 13.7, slightly higher than 2016 and 5YA.

HARVEST MYCOTOXINS

- All but two samples, or 98.9 percent, of the 2017 corn samples tested below the U.S. Food and Drug Administration (FDA) action level (20 parts per billion) for aflatoxins.
- One hundred percent of the samples tested below the U.S. FDA advisory level (5 parts per million for hogs and other animals; 10 parts per million for chicken and cattle) for deoxynivalenol (DON) or vomitoxin.

CORN CROP PRODUCTION

The U.S. Department of Agriculture (USDA) World Agricultural Supply and Demand Estimate (WASDE) report released in November 2017 estimates U.S. corn production at 370.30 million metric tons (14.578 billion bushels) in 2017, a 3.8 percent decline in production from the record 2016 crop. The United States is the top exporter of corn, with an estimated 32.3 percent of global corn exports during the 2017/2018 marketing year.

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



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VIEW THE FULL REPORT ONLINE IN EARLY DECEMBER

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