

Immediate Release

December 6, 2019

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The Ohio Corn Performance Test have been released for 2019 for both early and full season corn varieties representing 20 companies and totaling 163 corn hybrids. Three tests were conducted in Northwestern region. Due to the excessive wet weather, corn was planted much later than normal in June. The Northwestern test sites at Hoytville, Upper Sandusky, and Van Wert had plenty of rain during the growing season with better than expected yields. The Northwestern region experienced poor drying conditions and late harvest resulting in higher grain moisture and lower test weights. Since Upper Sandusky was planted so late (June 22), harvest data is still not available and the corn was almost mature when a killing frost occurred the first week in November.

At the Hoytville (June 4/October 28) and Van Wert Site (June 12/November 18), 52 early maturing corn varieties were planted/harvested. Early maturing corn are varieties with relative maturities of 90 to 100 days (short season corn). The average yield was 232 bushels with a range 205-249 (232; 205-249). Moisture (22.6, 20.1-26.1), test weight (53.8, 50.7-57.3), emergence (94, 85-99) and population (33,000; 27,500-37,600) were also recorded. The early maturing short season corn varieties can be compared to the late relative maturity varieties (104 to 109 days). Late corn yield in bushels (237, 214-251), moisture (26.9, 23.2-31.8), test weight (56.6, 54.5-58.5), emergence (97, 90-99), and population (33,700, 28,100-36,700) were fairly similar in 2019 due to a shorter growing season and weather.

Comparing the early short season to late full season corn varieties, the yield difference on average for early short season corn was 5 bushels lower; moisture content 4.3% lower, test weight 2.8 lower with emergence and population being highly variety dependent. Early short season corn varieties have more poor performing varieties but several compete quite well with the late maturing corn varieties. Based on yield, 5 bushels for early corn is 2.1% yield difference however, moisture content is 19% lower.

Since it costs money to dry corn down to 15.5%, which category yielded the highest income? Corn income is highly variety dependent, the best early short season corn had income of \$943.52 based on a yield of 249 bushels, moisture 22.5%, test weight 53.5%, emergence 96% and population of 35,400. The highest income for a late full season corn variety had income of \$938.50 based on a yield of 250.5 bushels, moisture 24%, test weight 52.4%, emergence 97% and population of 32,600. Based on highest income, early short season corn did quite well.

Last year was a more normal year. Averaged across hybrids and locations, the late full maturity corn varieties (104 to 109 day hybrids) out yielded short season hybrids by 10% at Bucyrus and Wooster. In the early short season corn varieties, the 96 to 100 day hybrids averaged yields slightly more than 90 to 95 day hybrids. However, several of the short season hybrids produced yields comparable to commonly grown maturity hybrids and gross \$/A of some of the ultra-early hybrids exceeded those of most of the commonly grown late maturity hybrids.

Why might a farmer want to consider or at least take a hard look at growing early short season corn varieties? First, corn yield is highly dependent on moisture at pollination. If farmers pick the best of the best from early short season and late full maturity corn hybrids, AND plant the corn the same day, often the early short season varieties can out compete the later varieties because they pollinate during periods with less moisture stress, earlier in the summer. Second, early short season corn varieties dry down faster because they mature quicker, so drying costs are lower, and farmers have to haul less water from the field, saving on both labor and drying costs. Third, farmers can often get a 25-30 cent premium for early harvest corn at the elevator. Fourth, planting early season corn allows the farmer to get a cover crop planted; improving soil structure, adding carbon to the soil, and keeping both nutrients and soil in place. Plus, how many farmers like harvesting corn late in the season? It's hard on both man, machinery, and the soil, especially if the soil is wet. Planting early short season corn should be a consideration. Go to: https://www.oardc.ohio-state.edu/corntrials/CTC_Short_Season_2018_Progress_Report_FV.pdf for a complete report.