2009 Collaborative On-Farm Test (COFT) Results

Much of Colorado’s 2009 wheat acreage was planted to winter wheat varieties that have been tested in the COFT program which is in its 11th year of operation. In the fall of 2009, twenty-four eastern Colorado wheat producers planted COFT trials in Baca, Prowers, Kiowa, Cheyenne, Kit Carson, Washington, Phillips, Logan, Adams, and Weld counties. Each collaborator planted five varieties in side-by-side strips (approximately 1.25 acres per variety) at the same time and at the same seeding rate as they seeded their own wheat. Viable harvest results were obtained from 19 of the 24 tests- most of the failed tests were lost to severe hail damage.

The objective of the 2009 COFT was to compare performance and adaptability of popular and newly-released CSU varieties (Hatcher, Ripper, and Bill Brown), and promising commercial varieties from WestBred (Keota) and AgriPro (Hawken) under unbiased testing conditions. The COFT trial results are intended to be interpreted based on the average across all tests within a year and not on the basis of a single variety comparison on a single farm in one year. Interpreted as an average of 19 test results, the 2009 COFT results can be useful to farmers making variety deci- sions.

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2009 Collaborative On-Farm Tests (COFT) Variety Performance Results

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | 2009 Varieties1 | |  | |  | | COFT | |
| Ripper | | | Hatcher | | Bill Brown | | Hawken | | Keota | | Average | |
|  | Yield | Test Wt | Yield | Test Wt | Yield | Test Wt | Yield | Test Wt | Yield | Test Wt | Yield | Test Wt |
| County/Town | bu/ac2 | lb/bu | bu/ac2 | lb/bu | bu/ac2 | lb/bu | bu/ac2 | lb/bu | bu/ac2 | lb/bu | bu/ac2 | lb/bu |
| Adams/Bennett N. | 35.6 | 60.5 | 40.4 | 61.5 | 38.5 | 60.0 | 38.2 | 60.5 | 37.2 | 60.5 | 38.0 | 60.6 |
| Adams/Brighton E. | 59.1 | 60.5 | 49.3 | 61.5 | 54.9 | 62.5 | 49.9 | 62.0 | 51.0 | 60.5 | 52.9 | 61.4 |
| Baca/Walsh | 26.7 | 63.0 | 27.4 | 62.0 | 25.3 | 63.0 | 22.4 | 62.0 | 24.4 | 63.0 | 25.2 | 62.6 |
| Baca/Springfield | 23.1 | 59.0 | 20.2 | 59.0 | 19.1 | 58.0 | 19.0 | 58.0 | 16.4 | 58.0 | 19.6 | 58.4 |
| Baca/Vilas | 28.2 | 60.0 | 28.1 | 60.0 | 23.1 | 63.0 | 20.3 | 60.0 | 22.7 | 60.0 | 24.5 | 60.6 |
| Kiowa/Haswell | 48.4 | 62.0 | 48.7 | 63.0 | 49.4 | 65.0 | 46.8 | 64.0 | 48.6 | 63.0 | 48.4 | 63.4 |
| Cheyenne/Arapahoe | 55.4 | 58.0 | 57.7 | 59.0 | 57.0 | 60.0 | 48.9 | 58.0 | 50.2 | 59.0 | 53.8 | 58.8 |
| Logan/Sterling W | 54.6 | 57.5 | 61.8 | 59.5 | 60.1 | 60.5 | 51.4 | 59.0 | 51.3 | 60.0 | 55.8 | 59.3 |
| Logan/Fleming | 30.7 | 55.0 | 34.9 | 56.5 | 38.0 | 58.0 | 29.3 | 56.5 | 30.7 | 57.0 | 32.7 | 56.6 |
| Logan/Peetz | 29.3 | 58.5 | 28.2 | 60.0 | 28.1 | 60.6 | 22.3 | 61.0 | 27.3 | 61.5 | 27.0 | 60.3 |
| Phillips/Haxtun W. | 51.8 | 60.0 | 56.4 | 61.0 | 49.4 | 60.0 | 56.8 | 58.0 | 54.7 | 60.0 | 53.8 | 59.8 |
| Phillips/Haxtun S. | 43.7 | 60.0 | 56.1 | 60.0 | 53.3 | 60.0 | 45.1 | 59.0 | 45.7 | 59.0 | 48.8 | 59.6 |
| Phillips/Central | 66.0 | 60.0 | 65.4 | 60.0 | 72.0 | 60.0 | 64.9 | 60.0 | 67.7 | 57.0 | 67.2 | 59.4 |
| Prowers/Lamar | 20.1 | 61.0 | 18.1 | 60.0 | 20.5 | 62.0 | 23.8 | 62.0 | 19.8 | 61.0 | 20.5 | 61.2 |
| Washington/Akron | 51.7 | 58.5 | 46.4 | 59.0 | 48.9 | 60.0 | 47.9 | 59.0 | 42.5 | 60.5 | 47.5 | 59.4 |
| Washington/Woodlin | 73.4 | 59.0 | 43.3 | 59.0 | 43.4 | 58.5 | 53.2 | 59.0 | 54.0 | 59.0 | 53.5 | 58.9 |
| Washington/Woodrow | 41.1 | 58.0 | 48.4 | 59.0 | 34.7 | 58.0 | 42.9 | 58.5 | 35.4 | 58.5 | 40.5 | 58.4 |
| Weld/New Raymer | 44.0 | 63.5 | 48.1 | 62.5 | 53.1 | 63.0 | 43.6 | 63.5 | 43.9 | 63.0 | 46.5 | 63.1 |
| Yuma/Yuma | 50.4 | 57.0 | 31.4 | 54.0 | 33.1 | 60.0 | 34.3 | 57.0 | 36.4 | 54.0 | 37.1 | 56.4 |
| Average Yield/Test Wt | 43.9 | 59.5 | 42.6 | 59.8 | 42.2 | 60.6 | 40.1 | 59.8 | 40.0 | 59.7 | 41.7 | 59.9 |
| Significance3 Yield  Significance3 Test Wt | a | b | ab | b | b | a | c | b | c | b |  |  |

LSD (0.30) for yield = 1.5 bu/ac LSD (0.30) for test weight = 0.3 lb/bu

1Varieties are ranked left to right according to yield in 2009

2Yield corrected to 12% moisture

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3Significance: Varieties with different letters are significantly different from one another based on the LSD values (1.5 bu/ac for yield and 0.3 lb/bu for test weight)