

Chickasha Wheat Variety Trial Standard vs. Intensive Management Comparison

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Cooperator: South Central Research Station

Planting date: 10/16/2023 Harvest date: 6/14/2024

Tillage: Conventional

Notes:

Nitrogen: 6 lbs/ac 10-34-0 at planting, 40 lbs/ac 2/19/24, and 60 lbs/ac on 3/14/24

Fungicide: 2.5 oz/ac Tebucure 3.6 at jointing 3/14/24 and 9 oz/ac at flag leaf-boot stage on 4/3/24

Extension Educator: Kelly Burrows Previous crop: Austrian winter peas

Soil type: Dale silt loam

Soil test: pH= 7.5, N= 93, P= 46, K= 314

| Licensee | Variety | | Grain Yield | | Test Weight | | | Protein | | |
|------------|------------------------------|----------|-------------|------|-------------|-----------|------|----------|-----------|------|
| | | Standard | Intensive | Diff | Standard | Intensive | Diff | Standard | Intensive | Diff |
| | | | bu/ac | | | lb/bu | | _ | % | - |
| OGI | Paradox | 86 | 91 | 5 | 56.7 | 56.5 | -0.2 | 12.6 | 11.9 | -0.7 |
| OGI | Breadbox | 83 | 81 | -2 | 57.2 | 56.7 | -0.2 | 12.7 | 11.2 | -0.7 |
| Westbred | WB4401 | 81 | 92 | 11 | 59.2 | 59.0 | -0.2 | 11.4 | 11.1 | -0.3 |
| Westbred | WB4792 | 80 | 92 | 12 | 57.7 | 58.8 | 1.1 | 11.6 | 11.4 | -0.2 |
| OGI | High Cotton | 80 | 90 | 10 | 59.1 | 58.6 | -0.5 | 12.1 | 12.1 | 0.0 |
| AgriPro | AP Prolific | 80 | 84 | 4 | 55.7 | 55.2 | -0.5 | 12.5 | 13.3 | 0.8 |
| OGI | Uncharted | 79 | 77 | -2 | 57.3 | 56.9 | -0.4 | 12.5 | 12.4 | -0.1 |
| OGI | Showdown | 79 | 95 | 16 | 56.4 | 57.2 | 0.8 | 11.7 | 12.2 | 0.5 |
| KWA | KS Providence | 77 | 76 | -1 | 56.0 | 56.0 | 0.0 | 12.3 | 12.3 | 0.0 |
| LCS | LCS Radar | 77 | 91 | 14 | 57.7 | 58.3 | 0.6 | 12.5 | 12.4 | -0.1 |
| OGI | Strad CL+ | 76 | 85 | 9 | 56.7 | 57.1 | 0.4 | 12.2 | 13.1 | 0.9 |
| AgriPro | AP Roadrunner | 76 | 89 | 13 | 54.7 | 56.0 | 1.3 | 12.2 | 12.4 | 0.2 |
| AGSECO | AG Golden | 75 | 91 | 16 | 55.1 | 56.0 | 0.9 | 11.0 | 11.7 | 0.7 |
| OGI | Gallagher | 74 | 82 | 8 | 56.5 | 56.9 | 0.4 | 11.8 | 12.1 | 0.3 |
| LCS | LCS Warbird AX | 73 | 74 | 1 | 57.8 | 58.0 | 0.2 | 13.0 | 11.7 | -1.3 |
| OGI | Doublestop CL+ | 73 | 70 | -3 | 59.0 | 58.6 | -0.4 | 13.1 | 12.6 | -0.5 |
| KWA | KS Mako | 72 | 94 | 22 | 56.9 | 58.6 | 1.7 | 11.9 | 12.1 | 0.2 |
| OGI | Green Hammer | 72 | 73 | 1 | 57.7 | 58.4 | 0.7 | 13.4 | 13.1 | -0.3 |
| OGI | Firebox | 72 | 82 | 10 | 59.0 | 59.1 | 0.1 | 13.0 | 13.3 | 0.3 |
| AgriPro | Bob Dole | 71 | 79 | 8 | 57.1 | 57.0 | -0.1 | 12.5 | 12.7 | 0.2 |
| PlainsGold | Canvas | 71 | 89 | 18 | 55.9 | 57.2 | 1.3 | 11.8 | 12.4 | 0.6 |
| Croplan | CP7869 | 71 | 77 | 6 | 56.7 | 57.2 | 0.5 | 12.4 | 11.6 | -0.8 |
| PlainsGold | Crescent AX | 70 | 75 | 5 | 58.8 | 58.9 | 0.1 | 11.9 | 12.2 | 0.3 |
| AgriPro | AP24 AX | 70 | 83 | 13 | 56.3 | 56.5 | 0.2 | 10.6 | 11.8 | 1.2 |
| LCS | LCS Helix AX | 70 | 82 | 12 | 58.8 | 59.3 | 0.5 | 12.3 | 12.0 | -0.3 |
| Armor | AR Turret 25 | 70 | 83 | 13 | 57.0 | 57.1 | 0.1 | 12.7 | 12.0 | -0.7 |
| OGI | Smith's Gold | 69 | 78 | 9 | 58.9 | 58.9 | 0.0 | 12.3 | 12.3 | 0.0 |
| PlainsGold | CO18035RA | 68 | 88 | 20 | 55.5 | 57.4 | 1.9 | 11.9 | 11.9 | 0.0 |
| LCS | LCS Atomic AX | 66 | 79 | 13 | 56.1 | 56.5 | 0.4 | 13.2 | 12.3 | -0.9 |
| OGI | Big Country | 66 | 71 | 5 | 58.1 | 57.8 | -0.3 | 12.6 | 12.1 | -0.5 |
| LCS | LCS Steel AX | 66 | 93 | 27 | 54.9 | 57.5 | 2.6 | 12.0 | 11.7 | -0.3 |
| AgriPro | AP Bigfoot | 65 | 82 | 17 | 56.2 | 57.2 | 1.0 | 11.2 | 12.1 | 0.9 |
| Croplan | CP7220 | 65 | 84 | 19 | 57.1 | 57.3 | 0.2 | 11.5 | 11.4 | -0.1 |
| Armor | AR Iron Eagle 22AX | 64 | 98 | 34 | 54.4 | 57.7 | 3.3 | 11.3 | 11.9 | 0.6 |
| LCS | LCS Galloway AX | 63 | 76 | 13 | 57.9 | 58.3 | 0.4 | 12.6 | 12.9 | 0.3 |
| AgriPro | SY Wolverine | 62 | 94 | 32 | 52.6 | 54.4 | 1.8 | 12.9 | 12.4 | -0.5 |
| LCS | LCS Runner | 62 | 82 | 20 | 56.0 | 57.2 | 1.2 | 11.0 | 11.6 | 0.6 |
| LCS | LCS Photon AX | 66 | 79 | 13 | 54.3 | 57.3 | 3.0 | 12.4 | 11.8 | -0.6 |
| Croplan | CP7017AX | 61 | 98 | 37 | 54.7 | 57.8 | 3.1 | 11.6 | 11.6 | 0.0 |
| Westbred | WB4422 | 59 | 101 | 42 | 52.8 | 58.8 | 6.0 | 12.8 | 13.0 | 0.2 |
| PlainsGold | Byrd CL Plus | 57 | 90 | 33 | 53.3 | 57.7 | 4.4 | 12.5 | 11.4 | -1.1 |
| Westbred | WB4632 | 57 | 99 | 42 | 53.9 | 57.4 | 3.5 | 11.5 | 11.3 | -0.2 |
| PlainsGold | Kivari AX | 57 | 82 | 25 | 52.5 | 55.8 | 3.3 | 11.5 | 11.6 | 0.1 |
| OGI | Butler's Gold (late-planted) | 56 | 54 | -2 | 59.1 | 58.5 | -0.6 | 12.3 | 13.7 | 1.4 |
| LCS | LCS Julep | 46 | 85 | 39 | 54.2 | 58.6 | 4.4 | 12.5 | 12.1 | -0.4 |
| PlainsGold | Whistler | 42 | 84 | 42 | 53.7 | 57.1 | 3.4 | 10.1 | 11.1 | 1.0 |
| AGSECO | AG Radical | 39 | 85 | 46 | 50.0 | 54.8 | 4.8 | 13.0 | 12.2 | -0.8 |
| OGI | OK Corral | | 80 | _ | 56.1 | 56.6 | 0.5 | 11.7 | 11.3 | -0.4 |
| | Experimentals | | | 0 | | | | | | |
| OSU | OK16107133-19-4 | 82 | 93 | 11 | 56.3 | 56.5 | 0.2 | 12.0 | 11.6 | -0.4 |
| OSU | OK20708 | 80 | 88 | 8 | 56.5 | 57.0 | 0.5 | 11.7 | 11.7 | 0.0 |
| OSU | OK198417C | 79 | 88 | 9 | 58.8 | 59.5 | 0.7 | 12.5 | 12.1 | -0.4 |
| OSU | OK16107133-19-3 | 76 | 72 | -4 | 57.2 | 56.7 | -0.5 | 11.9 | 12.3 | 0.4 |
| | Mean | 69 | 84 | 16 | 56.3 | 57.4 | 1.1 | 12.1 | 12.1 | 0.0 |
| | LSD (0.05) | 9 | 12 | | 1.2 | 1.2 | | 1.3 | 1.3 | - |

Grain yield was adjusted to 12% moisture content. Shaded values were not statistically different from the highest value within a column. Butler's Gold late-planted was planted on 12/04/2023. Lodging was evaluated at harvest on a 0 to 5 scale with 0 indicating no lodging and 5 plot completely lodged. * Brackling was observed.OK Corral had a 20% yield loss due to deer damage and yield data was removed from standard management trial. Stripe and leaf rust fungal diseases were observed at moderate to severe pressure in the season. Disease severity ratings were collected on April 30 (around anthesis). The trial received 3.8" rainfall between harvest maturity and the time it could be harvested, thus driving down test weight. Double-dashes"—" = data not available.