

## **2021 Hill County Preliminary Report Wheat**



Preliminary Data Compiled by: Zach Davis, County Extension Agent – Agriculture & Natural Resources Tyler Mays, Extension Agent – IPM Hill/McLennan County

Trade names of commercial products used in this report are included only for better understanding and clarity.

Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas A&M University is implied.

Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.



July 29, 2021

Dear Producers,

This preliminary report contains information on applied research in wheat conducted over the past growing season. It is always good to review several years of data before making conclusions, especially when considering strip trial data as conditions may vary across a field.

Also included are data from the Blackland Region to offer additional information. Additionally, charts with 2018 varietal characteristics has been included. Utilize this with the understanding that some characteristics may change slightly once 2019 information has been finalized. Please visit the website varietytesting.tamu.edu for more information on wheat and additional crops.

Results from our replicated trials include a statistical analysis. Significant differences among data means will be marked with a letter. Means that are not significantly different are considered equal; i.e. the difference in their values is because of random chance and not because of variety differences or trial variables.

We would like to thank P&M Farms, Phil Pustejovsky and Ronnie Marak, for their willingness to be cooperating producers with Texas A&M AgriLife Extension Service on the variety trials. A special thanks is also extended to Chad Radke for his cooperation in conducting the wheat fungicide trial. We truly could not do our work without the help of Hill County producers. Additionally, special appreciation is extended to Mr. Russell Sutton, Texas A&M AgriLife – Assistant Research Scientist, for implementing the variety trials, and Dr. Fernando Guillen Portal, Assistant Professor & Extension Specialist - Small Grains and Oil Seed Crops, for the statistical analyses of data.

Please do not hesitate to contact us with any questions or comments.

Zach Davis, CÉA-AG/NR

Hill County

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Hill/McLennan Counties

2021 0		HRWW, Hill County (	Yield (bu/ac)	Test Wt (lb/bu)
<b>Rank</b> <sup>†</sup>	Variety	Source	2021	2021
1	Bob Dole	Syngenta	49.5	56.7
2	OK16D101089	OSU	45.7	57.8
3	TX14A001035*	TAMU	45.3	57.7
4	OCW04S717T-6W	OSU	42.2	55.3
5	TX16M9216*	TAMU	41.9	54.8
6	TAM 205	Adaptive Genetics	40.9	57.3
7	WB4418	WestBred	40.7	55.6
8	TX14M7061*	TAMU	37.9	52.1
9	TX15M8024*	TAMU	37.9	54.0
10	AP Roadrunner	Syngenta	36.1	54.3
11	TX14A001249*	TAMU	35.5	54.1
12	AP EverRock	Syngenta	34.6	55.4
13	CP7050AX	Croplan	33.7	55.8
14	WB4401	WestBred	32.1	53.4
15	TAM 114	Adaptive Genetics	32.0	54.0
16	TX14V70214*	TAMU	30.3	51.8
17	TAM 304	Scott Seed	29.0	49.9
18	WB4303	WestBred	28.9	48.2
19	WB4699	WestBred	25.6	49.6
20	TAM W-101	TAMU	21.8	47.7
21	CP7017AX	Croplan	18.8	47.7
	LSD (0.05)		6.5	3.4
	CV (%)		11.2	3.9
<u>*F</u> '	Mean		35.3	53.5

\*Experimental breeding line.

<sup>†</sup>Varieties ranked according to 2021 yield averages.

			Yield (bu/ac)			Test Wt (lb/bu)	
<b>Rank</b> <sup>†</sup>	Variety	Source	4-Year <sup>‡</sup>	3-Year	2-Year	2021	2021
1	TAM 114	Adaptive Genetics	48.4	58.5	64.4	32.0	54.0
2	TAM 304	Scott Seed	46.2	55.5	59.3	29.0	49.9
3	TAM W-101	TAMU	34.6	42.1	43.8	21.8	47.7
4	WB4303	WestBred		54.4	56.7	28.9	48.2
5	TAM 205	Adaptive Genetics			64.7	40.9	57.3
6	WB4418	WestBred			55.0	40.7	55.6
7	Bob Dole	Syngenta				49.5	56.7
8	OK16D101089	OSU				45.8	57.8
9	TX14A001035*	TAMU				45.3	57.7
10	OCW04S717T-6W	OSU				42.2	55.3
11	TX16M9216*	TAMU				41.9	54.8
12	TX14M7061*	TAMU				37.9	52.1
13	TX15M8024*	TAMU				37.9	54.0
14	AP Roadrunner	Syngenta				36.1	54.3
15	TX14A001249*	TAMU				35.5	54.1
16	AP EverRock	Syngenta				34.6	55.4
17	CP7050AX	Croplan				33.7	55.8
18	WB4401	WestBred				32.1	53.4
19	TX14V70214*	TAMU				30.3	51.8
20	WB4699	WestBred				25.6	49.6
21	CP7017AX	Croplan				18.8	47.7
	LSD (0.05)		3.7	5.8	6.0	6.5	3.4
	CV (%)		10.4	11.9	8.7	11.2	3.9
	Mean		43.1	52.6	57.3	35.3	53.5

2021 Stand Alone Averages 2021 Uniform Variety Trial: HRWW, Hill County (Abbott, TX)

\*Experimental breeding line.

†Varieties ranked according to 4-year, 3-year, 2-year, then 2021 yield averages.

‡4-year average based on 2018, 2019, 2020, and 2021 data.

2021 Uniform variety I rial: SK w w, Hill County (Addott,	Trial: SRWW, Hill County (Abbott, TX)	2021 Uniform Variety Tria
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·			Yield (bu/ac)	Test W
Rank†	Variety	Source	2021	2021
1	PGX 20-15	Prongeny	62.1	58.1
2	USG 3895	Uni-South Genetics	60.0	54.5
3	Go Wheat 6000	Stratton Seed	59.1	57.0
4	AR09137UC-17-2	SunGrains-Univeristy of Arkansas	57.3	57.0
5	LA12275LDH-56	SunGrains- LSU	57.2	59.8
6	TX17D2337	SunGrains- Texas A&M AgriLife Res.	55.2	57.5
7	USG 3472	Uni-South Genetics	54.7	55.2
8	LANC 11558-33	SunGrains- LSU	53.7	57.9
9	AGS 2055	Stratton Seed	53.5	54.8
10	Dyna-Gro 9811	Dyna-Gro	53.1	56.1
11	Blackland 1828	Blackland Seeds	52.2	52.7
12	AgriMAXX 492	AgriMAXX	52.0	56.7
13	LA12080LDH-72	SunGrains- LSU	51.3	55.7
14	LA13154D-WN1	SunGrains- LSU	50.9	54.8
15	AGS 2038	Stratton Seed	50.8	57.7
16	LA15203LDH-274	SunGrains- LSU	50.8	56.2
10	PROGENY PGX 19-12	Prongeny	50.8	53.9
17	AgriMAXX 473		50.8	55.9
	8	AgriMAXX		
19	TX16DDH579	SunGrains- Texas A&M AgriLife Res.	50.3	60.1
20	AGS 2021	Stratton Seed	50.2	56.6
21	AgriMAXX 514	AgriMAXX	49.4	52.8
22	LA15203LDH-112	SunGrains- LSU	49.1	57.1
23	Blackland 1812	Blackland Seeds	49.0	54.6
24	Go Wheat LA754	Stratton Seed	48.9	56.1
25	PROGENY PGX 19-17	Prongeny	48.5	53.7
26	AR15V31-26-2285N	SunGrains-Univeristy of Arkansas	48.4	58.0
27	PROGENY PGX 18-7	Prongeny	48.0	56.6
28	Dyna-Gro Riverland	Dyna-Gro	47.5	56.0
29	USG 3562	Uni-South Genetics	47.2	55.8
30	Dyna-Gro 9002	Dyna-Gro	46.8	51.8
31	Blackland EXP 2032	Blackland Seeds	46.6	54.2
32	LA15166LDH-272	SunGrains- LSU	46.3	54.6
33	TX17D2452	SunGrains- Texas A&M AgriLife Res.	45.2	54.7
34	USG 3329	Uni-South Genetics	44.4	50.6
35	AR11051-15-3	SunGrains-University of Arkansas	44.2	57.4
36	AGS 2024	Stratton Seed	44.0	54.7
37	Dyna-Gro 9120	Dyna-Gro	43.6	54.4
38	WB2606	WestBred	43.4	55.4
39	USG 3640	Uni-South Genetics	43.3	55.3
40	Go Wheat 2032		43.1	57.5
		Stratton Seed SunGrains- University of Florida		
41	FLLA11004-7	5	42.4	53.4
42	GA12505B14-18LE23F	SunGrains-University of Georgia	42.0	56.2
43	Dyna-Gro Blanton	Dyna-Gro	41.0	55.7
44	PROGENY PGX 19-10	Prongeny	40.0	52.8
45	AgriMAXX 481	AgriMAXX	40.0	56.8
46	GA10127-18E26	SunGrains-University of Georgia	39.8	54.0
47	Dyna-Gro Rutledge	Dyna-Gro	39.2	54.3
48	GA15VDH-FHB-MAS30-18ESc43F	SunGrains-University of Georgia	38.7	51.4
49	Dyna-Gro Plantation	Dyna-Gro	37.5	56.2
50	GA15VDH-FHB-MAS23-18LE43F	SunGrains-University of Georgia	36.7	52.5
51	GA131246LDH-18E35	SunGrains-University of Georgia	36.1	52.2
52	FLLA10033C-6	SunGrains- University of Florida	35.3	51.1
53	AGS 3040	Stratton Seed	35.1	54.2
54	FL14167LDH-158	SunGrains- University of Florida	32.5	51.8
55	XD2507	WestBred	24.4	49.9
	LSD (0.05)		5.4	2.1
	CV (%)		7.1	2.1
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†Varieties ranked according to 2021 yield averages.

2021 Stand Alone Averages
2021 Uniform Variety Trial: SRWW, Hill County (Abbott, TX)

			Yield (bu/ac)			Test Wt (lb/bu)	
$\mathbf{Rank}^{\dagger}$	Variety	Source	4-Year <sup>‡</sup>	3-Year	2-Year	2021	2021
1	USG 3895	Uni-South Genetics	75.4	70.7	65.6	60.0	54.5
2	AGS 2055	Stratton Seed	71.3	65.1	58.9	53.5	54.8
3	AGS 2024	Stratton Seed	68.6	62.5	57.8	44.0	54.7
4	Dyna-Gro 9811	Dyna-Gro	67.9	60.8	56.2	53.1	56.1
5	AGS 2038	Stratton Seed	66.6	61.0	57.7	50.8	57.7
6	AgriMAXX 481	AgriMAXX		61.4	52.7	40.0	56.8
7	Blackland 1812	Blackland Seeds		57.9	51.1	49.0	54.6
8	Go Wheat 6000	Stratton Seed			65.3	59.1	57.0
9	AgriMAXX 492	AgriMAXX			59.0	52.0	56.7
10	Go Wheat 2032	Stratton Seed			58.2	43.1	57.5
11	TX16DDH579	SunGrains- Texas A&M AgriLife Res.			57.5	50.3	60.1
12	Dyna-Gro Blanton	Dyna-Gro			57.5	41.0	55.7
13	Go Wheat LA754	Stratton Seed			55.3	48.9	56.1
14	Dyna-Gro Riverland	Dyna-Gro			55.2	47.5	56.0
15 16	USG 3640 WB2606	Uni-South Genetics WestBred			55.2 54.0	43.3 43.4	55.3 55.4
					53.8	43.4 37.5	56.2
17 18	Dyna-Gro Plantation LA15203LDH-274	Dyna-Gro SunGrains- LSU			53.8 52.9	57.5 50.8	56.2 56.2
18	Dyna-Gro 9002	Dyna-Gro			52.9 51.6	30.8 46.8	50.2 51.8
20	LA15203LDH-112	SunGrains- LSU			51.6	46.8 49.1	51.8
20	USG 3329	Uni-South Genetics			51.2	44.4	50.6
21	LA15166LDH-272	SunGrains- LSU			50.6	46.3	54.6
22	AGS 3040	Stratton Seed			48.7	35.1	54.2
23	PGX 20-15	Prongeny			40.7	62.1	58.1
25	AR09137UC-17-2	SunGrains-University of Arkansas				57.3	57.0
26	LA12275LDH-56	SunGrains- LSU				57.2	59.8
20	TX17D2337	SunGrains- Texas A&M AgriLife Res.				55.2	57.5
28	USG 3472	Uni-South Genetics				54.7	55.2
29	LANC 11558-33	SunGrains- LSU				53.7	57.9
30	Blackland 1828	Blackland Seeds				52.2	52.7
31	LA12080LDH-72	SunGrains- LSU				51.3	55.7
32	LA13154D-WN1	SunGrains- LSU				50.9	54.8
33	PROGENY PGX 19-12	Prongeny				50.8	53.9
34	AgriMAXX 473	AgriMAXX				50.5	55.9
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36	AgriMAXX 514	AgriMAXX				49.4	52.8
37	PROGENY PGX 19-17	Prongeny				48.5	53.7
38	AR15V31-26-2285N	SunGrains-University of Arkansas				48.4	58.0
39	PROGENY PGX 18-7	Prongeny				48.0	56.6
40	USG 3562	Uni-South Genetics				47.2	55.8
41	Blackland EXP 2032	Blackland Seeds				46.6	54.2
42	TX17D2452	SunGrains- Texas A&M AgriLife Res.				45.2	54.7
43	AR11051-15-3	SunGrains-Univeristy of Arkansas				44.2	57.4
44	Dyna-Gro 9120	Dyna-Gro				43.6	54.4
45	FLLA11004-7	SunGrains- University of Florida				42.4	53.4
46	GA12505B14-18LE23F	SunGrains-University of Georgia				42.0	56.2
47	PROGENY PGX 19-10	Prongeny				40.0	52.8
48	GA10127-18E26	SunGrains-University of Georgia				39.8	54.0
49	Dyna-Gro Rutledge	Dyna-Gro				39.2	54.3
50	GA15VDH-FHB-MAS30-18ESc43F	SunGrains-University of Georgia				38.7	51.4
51	GA15VDH-FHB-MAS23-18LE43F	SunGrains-University of Georgia				36.7	52.5
52	GA131246LDH-18E35	SunGrains-University of Georgia				36.1	52.2
53	FLLA10033C-6	SunGrains- University of Florida				35.3	51.1
54	FL14167LDH-158	SunGrains- University of Florida				32.5	51.8
55	XD2507	WestBred				24.4	49.9
	LSD (0.05)		3.9	4.5	4.8	5.4	2.1
	CV (%)		6.7	7.5	7.6	7.1	2.4
	Mean		70.0	62.8	55.5	46.6	55.1

†Varieties ranked according to 4-year, 3-year, 2-year, then 2021 yield averages. ‡4-year average based on 2018, 2019, 2020, and 2021 data.

## 2021 Wheat Fungicide Trial

Treatment <sup>1</sup>	Fungicide Cost <sup>2</sup>	Stripe Rust Severity	Yield	Test Weight	Gross Return <sup>3</sup>	Net Return <sup>4</sup>
Untreated Check	\$0.00	83.3a	45.26 b	53.4	271.53 b	271.53
Propiconazole @ 4 fl oz/acre, fb	\$3.56	24.3 b	55.35 ab	57.58	332.07 ab	328.51
Tebuconazole @4 fl oz./acre						
Alto @ 3 fl. oz./acre, fb	\$19.89	7.3 b	60.28 a	57.98	366.65 a	341.76
Trivapro @ 13.7 fl oz./acre						
Trivapro @ 9 fl. oz./acre, fb	\$14.34	2.4 b	62.82 a	57.7	376.89 a	362.55
Alto @ 3 fl. oz./acre						

<sup>1</sup> - Treatments were applied at Feekes 7 (two nodes visible) and Feekes 10.5 (head emergence)

 $^{\rm 2}$  - Cost were averaged across three different chemical distributors in the area

 $^{\rm 3}$  - Calculated based on wheat prices at \$6.00 per bushel and no dock for test weights

<sup>4</sup> - Calculated by subtracting the cost of fungicide from the gross return