



General Area Crop Progress

Recent periods of sunshine and warmer temperatures allowed for some field work but most fields are still very wet. Some of the corn that was planted may need to be replanted due poor stands. Based on the weather forecast we may be pushing up against the corn planting insurance deadline of April 15th. Wheat fields are variable depending on topography, planting date and variety. Most have wet spots and even standing water. All have emerged flag leaves and some earlier varieties are heading. Wheat plants in wet areas remain stressed, are stunted because of moisture and poor root growth but not necessarily due to nitrogen deficiency. Nitrogen in saturated soils can be lost by leaching or denitrification into the air, but loss varies greatly by nitrogen form, pH, temperature, and soil microbiology. Nitrogen in the form of ammonium can be held by our clay soils and cooler temperatures slow the process of conversion to nitrogen gas that is lost to the atmosphere. .

The greater problem with our current moisture is foliar disease. We are seeing stripe rust only in the most susceptible varieties and leaf rust has not really taken off but has been ob-

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served south of us, so we know the inoculum is present for both. Septoria leaf blotch appears to be wide spread, see pictures above; until recently it appeared as yellow spots with some darkening centers but now it shows little black dots or pycnidia in the lesions. Pycnidia are fruiting structures that produce spores. We do not have good data on variety resistance to Septoria leaf blotch and a recent review of our variety trials showed most varieties have leaf blotch in the lower leaves. Last year , 2019: we observed a higher incidence of bacterial streak associated with Septoria leaf blotch and lower incidence of both in fungicide treated fields.

Now is the time for a timely fungicide application to protect the flag leaf from the rusts and to control Septoria. Note that Tebuconazole alone is not labeled for Septoria leaf blotch or Stagonospora glume blotch. Propiconazole and most fungicide products with a mixture of two or more active ingredients are labeled. Also note that in our attached fungicide trials products with two or more active ingredients generally gave longer protection and increased yield and/or test weight. The enclosed fungicide profitability trial also shows varietal differences to a single fungicide applications as compared to untreated controls.

TREATMENTS ¹	Leaf Rust Infection Flag Leaf (%)	Leaf Rust Infection Flag Leaf (%)	Green Leaves ² (0-4)	Yield 13% Moisture (bu/ac)	Test Weight (lb/bu)	Thousand Kernel Weight (grams)
	5/13/19	5/23/19	5/23/2019			
Untreated Check	60.0 e	100.0 f	0.0 e	59.5 i	53.3 h	28.7 e
Priaxor @ 2 oz/A (GS 5-7) fb Nexicor @ 7 oz/A (GS 8-10)	0.0 a	0.0 a	2.9 ab	84.9 ab	57.4 a	32.4 ab
Nexicor @ 7 oz/A (GS 8-10)	0.0 a	0.0 a	2.5 ab	81.5 a-e	56.8 a-e	31.6 ab
BAS 751 @ 7 oz/A (GS 8-10)	0.0 a	0.0 a	2.6 ab	83.7 abc	57.2 abc	32.6 ab
BAS 753 @ 8 oz/A (GS 8-10)	0.0 a	0.0 a	3.1 ab	84.8 ab	57.3 ab	32.9 ab
BAS 753 @ 4 oz/A (GS 5-7) fb BAS 753 @ 4 oz/A (GS 8-10)	0.0 a	0.0 a	2.1 a-d	82.4 a-d	57.0 a-d	32.0 ab
TebuStar 3.6 L @ 4 oz/A (GS 5-7)	13.8 b	35.0 d	1.1 b-e	75.2 c-h	55.8 ef	30.8 bcd
TebuStar 3.6 L @ 4 oz/A (GS 8-10)	0.0 a	0.0 a	2.1 a-d	77.8 a-g	56.3 b-e	31.0 a-d
TebuStar 3.6 L @ 2 oz/A (GS 5-7) fb TebuStar 3.6 L @ 2 oz/A (GS 8-10)	0.0 a	0.0 a	3.3 ab	79.0 a-f	56.2 b-e	31.7 ab
Absolute Maxx @ 4 oz/A (GS 8-10)	0.0 a	0.0 a	3.1 ab	82.9 a-d	56.3 b-e	32.2 ab
Stratego YLD @ 4 oz/A (GS 8-10)	0.0 a	16.3 bc	3.3 ab	79.9 a-f	56.2 b-e	32.5 ab
Prostaro 421SC @ 6.5 oz/A (GS 8-10)	0.0 a	0.0 a	3.3 ab	77.8 a-g	56.2 b-e	31.9 ab
Prostaro 421SC @ 3.25 oz/A (GS 5-7) fb Prostaro 421SC @ 3.25 oz/A (GS 8-10)	0.0 a	0.0 a	2.9 ab	82.0 a-d	56.1 cde	31.7 ab
Alto 100SL @ 3 oz/A (GS 5-7) fb Trivapro @ 13.7 oz/A + COC @ 1% v/v (GS 8-10)	0.0 a	0.0 a	3.5 a	83.2 abc	57.3 ab	33.2 a
Trivapro @ 13.7 oz/A + COC @ 1% v/v (GS 5-7)	0.0 a	7.0 a	1.8 a-e	74.6 d-h	55.9 ef	31.3 abc
Trivapro @ 9.5 oz/A + COC @ 1% v/v (GS 5-7) fb Alto 100SL @ 3 oz/A (GS 8-10)	0.0 a	0.0 a	2.9 ab	80.0 a-f	56.4 b-e	32.0 ab
Trivapro @ 13.7 oz/A + COC @ 1% v/v (GS 8-10)	0.0 a	0.0 a	3.0 ab	83.6 abc	56.7 a-e	32.8 ab
Trivapro @ 9.5 oz/A + COC @ 1% v/v (GS 5-7) fb Trivapro @ 13.7 oz/A + COC @ 1% v/v (GS 8-10)	0.0 a	0.0 a	3.3 ab	85.8 a	57.1 abc	32.4 ab
Alto 100 SL @ 3 oz/A (GS 5-7) fb Tilt 3.6 EC @ 4 oz/A (GS 8-10)	0.0 a	11.3 ab	1.9 a-e	78.0 a-g	55.7 ef	30.9 bcd
Alto 100 SL @ 4 oz/A (GS 8-10)	0.0 a	1.3 a	2.9 ab	82.6 a-d	56.2 cde	31.7 ab
Tilt 3.6 EC @ 4 oz/A (GS 8-10)	0.0 a	21.3 c	2.6 ab	80.2 a-e	56.0 de	31.4 ab
Alto 100 SL @ 3 oz/A + Tilt 3.6 EC @ 4 oz/A (GS 8-10)	0.0 a	1.3 a	2.3 abc	76.8 b-g	56.1 cde	31.1 a-d
Topguard @ 5 oz/A (GS 3-5)	30.0 cd	95.0 ef	0.3 cde	70.2 gh	54.8 g	29.5 cde
Topguard @ 5 oz/A + Affinity BS @ 0.4 oz/A (GS 3-5)	33.8 d	92.5 ef	0.4 cde	68.4 h	54.8 g	29.2 de
Topguard @ 10 oz/A (GS 3-5)	26.3 c	90.0 e	0.4 cde	71.9 fgh	55.1 fg	29.5 cde
Topguard @ 5 oz/A + Affinity BS @ 0.4 oz/A + 28% Nitrogen (GS 3-5)	30.0 cd	97.5 ef	0.1 de	62.9 i	53.9 h	28.2 e
Topguard @ 5 oz/A (GS 3-5) fb Topguard EQ @ 5 oz/A (GS 8-10)	1.5 a	32.5 d	2.0 a-d	77.9 a-g	56.2 cde	31.9 ab
Topguard @ 5 oz/A + Affinity BS @ 0.4 oz/A (GS 3-5) fb Topguard EQ @ 5 oz/A (GS 8-10)	1.3 a	36.3 d	1.6 a-e	75.9 c-g	55.9 ef	30.9 bcd
Topguard EQ @ 5 oz/A (GS 8-10)	0.8 a	35.0 d	1.4 a-e	73.5 e-h	56.2 cde	31.0 bcd
LSD (P = .05)	3.48	6.61	1.19	4.76	0.62	1.17
CV (%)	36.34	20.29	39.36	5.36	0.96	2.66
GRAND MEAN	6.80	23.17	2.15	77.82	56.07	31.34

¹Unless otherwise indicated, Induce @ 0.25% v/v (NIS) added to treatments, COC (Agri-Dex) ²Green Leaves Rating Scale: 0 – None, 1 – 25% remaining, 2 – 50% remaining, 3 – 75% remaining, 4 – 100% remaining Application Timing Data

March 27, 2019 applied "GS 3-5" Treatment; WIND: 5-8 mph SSE, TEMP: 68°F, RH: 48%; no dew, sunshine; Wheat @ Feekes 4; No disease

April 12, 2019 applied "GS 5-7" Treatments; WIND: 6-8 mph E, TEMP: 66°F, RH: 35%; no dew, sunshine; Wheat @ Feekes 9 (flagleaf fully emerged); No disease

April 26, 2019 applied "GS 8-10" Treatments; WIND: 4 mph ENE, TEMP: 73°F, RH: 36%; no dew, sunshine; Wheat @ Feekes 10.5; No disease

MEAN Comparison Summary

Table 2. Comparison of selected SRWW and HRWW varieties treated and untreated with a fungicide.

VARIETIES ¹ /TREATMENT ²	Leaf Rust Infection on Flag Leaf ³ (%) May 15, 2019	Yield ³ (bu/ac)	Yield Bush-el/Ac Increase over Unsprayed	Test Weight ³ (lb/bu)	Test Weight lb/bu Increase over Unsprayed
AGS 2038 - <i>Sprayed</i>	0.0 a	74.2 bc	9.6	58.8 abc	0.5
AGS 2055 - <i>Sprayed</i>	0.0 a	77.1 abc	0.1	56.6 e-i	0.5
Dyna-Gro 9522 - <i>Sprayed</i>	0.0 a	74.6 bc	17.3	56.5 f-j	2.7
Dyna-Gro TV 8861 - <i>Sprayed</i>	0.0 a	72.7 bcd	18.4	56.6 e-i	2.6
Pioneer 25R40 - <i>Sprayed</i>	0.0 a	81.0 a	18.9	57.0 efg	1.7
Syngenta Coker 9553 - <i>Sprayed</i>	0.0 a	71.1 cde	5.7	59.4 ab	- 0.1
TX-EL2 - <i>Sprayed</i>	0.0 a	75.6 abc	14.9	57.3 def	2.3
USG 3201 - <i>Sprayed</i>	0.0 a	71.1 cde	16.7	58.5 abc	3.1
USG 3458 - <i>Sprayed</i>	0.0 a	67.9 def	18.4	55.2 jkl	2.2
USG 3536 - <i>Sprayed</i>	0.0 a	72.1 cd	12.7	57.2 ef	0.8
USG 3895 - <i>Sprayed</i>	0.0 a	79.0 ab	12.1	55.7 g-l	1.2
Monsanto WB-Cedar (<i>HRWW</i>) - <i>Sprayed</i>	--- ¹	57.1 ij	6.8	56.8 e-h	1.2
Syngenta Monument (<i>HRWW</i>) - <i>Sprayed</i>	0.0 a	61.7 ghi	6.6	57.9 cde	1.0
TAM 114 (<i>HRWW</i>) - <i>Sprayed</i>	0.0 a	60.5 hij	11.6	58.6 abc	1.5
AGS 2038 - <i>Unsprayed</i>	0.0 a	64.6 fgh		58.3 bcd	
AGS 2055 - <i>Unsprayed</i>	0.0 a	77.0 abc		56.1 f-k	
Dyna-Gro 9522 - <i>Unsprayed</i>	67.5 e	57.3 ij		53.8 no	
Dyna-Gro TV 8861 - <i>Unsprayed</i>	66.3 e	54.3 jkl		54.0 mno	
Pioneer 25R40 - <i>Unsprayed</i>	40.0 c	62.1 f-i		55.3 i-l	
Syngenta Coker 9553 - <i>Unsprayed</i>	28.8 b	65.4 e-h		59.5 a	
TX-EL2 - <i>Unsprayed</i>	42.5 c	60.7 hij		55.0 klm	
USG 3201 - <i>Unsprayed</i>	40.0 c	54.4 jkl		55.4 i-l	
USG 3458 - <i>Unsprayed</i>	52.5 d	49.5 kl		53.0 o	
USG 3536 - <i>Unsprayed</i>	10.0 a	59.4 hij		56.4 f-j	
USG 3895 - <i>Unsprayed</i>	26.3 b	66.9 d-g		54.5 lmn	
Monsanto WB-Cedar (<i>HRWW</i>) - <i>Unsprayed</i>	--- ¹	50.3 kl		55.6 h-l	
Syngenta Monument (<i>HRWW</i>) - <i>Unsprayed</i>	26.3 b	55.1 jk		56.9 e-h	
TAM 114 (<i>HRWW</i>) - <i>Unsprayed</i>	70.0 e	48.9 l		57.1 ef	
<i>LSD (P = .05)</i>	6.00	4.21		0.83	
<i>CV (%)</i>	24.5	4.59		1.05	
GRAND MEAN	17.41	65.05		56.53	

¹Monsanto WB-Cedar removed from Leaf Rust Infection analysis (no green leaves to rate, combination of bacterial streak & rust)³Data Assessment Note: Reps 1 & 2 excluded from analysis due to fungicide application error²TREATMENT: April 29, 2019 applied TebuStar @ 4 fl.oz/A + NIS @ 0.25% v/v

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Calendar

May 4-8th Wheat Field Days—Ellis, Greenville, Howe. (**Tentative** Subject to COVID-19 Restrictions)

For more information on COVID-19 and the changing situation see

Texas A&M AgriLife Extension

Extension Disaster Education Network (EDEN)

EDEN information on the Coronavirus can be found at:

<https://texashelp.tamu.edu/coronavirus-information-resources/>