

University of Idaho

Extension

May 17, 2016

Thank you to all who have sent in reports!

There is no doubt in my mind - spray susceptible spring varieties especially at herbicide timing. Stripe rust is in Logan, Blue Creek, and Hyrum / Millville area of UT. It's in Preston, and **throughout southern Idaho** from Tetonia through Parma and into Ontario, OR, as well as throughout OR, WA, CA.

Positive samples are coming from Ririe, Jerome, Twin Falls, Arbon Valley, etc. Drylands and irrigated winter wheat.

We even have a small amount of SR in barley.

From Dr. Xianming Chen - Stripe rust - resistant reaction with necrotic stripes and very little sporulation



From Dr. Xianming Chen – Physiological Leaf Spot



Dr. Mike Flowers's stripe rust ratings in Oregon (only percent leaf area affected):



**2016 CLEARFIELD SOFT WINTER ELITE YIELD TRIALS
DISEASE NOTES**



Entry	Variety	Class	Hermiston (Irrigated)		Pendleton-Ruggs	
			Stripe Rust 4/29/2016 GS 10-10.5 % Severity		Stripe Rust 4/29/2016 GS 7-8 % Severity	
1	BOBTAIL	SWW	0		0	
2	LCS ARTDECO	SWW	21		16	
3	WB 1529	SWW	8		24	
4	SY OVATION	SWW	14		34	
5	LOR 334	SWW	7		9	
6	ORCF-101	SWW	5		7	
7	ORCF-102	SWW	10		19	
8	ORCF-103	SWW	85		19	
9	UI MAGIC CL+	SWW	30		14	
10	UI CASTLE CL+	SWW	2		5	
11	UI PALOUSE CL+	SWW	3		20	
12	CURIOSITY CL+	SWW	43		20	
13	MELA CL+	SWW	28		13	
14	WA 8235	SWW	0		0	
15	WB 1376 CLP	SWW	1		0	
	Site Average		17		13	
	LSD (0.05)		12		7	
	CV (%)		49		34	



2016 OREGON HARD WINTER ELITE YIELD TRIALS
DISEASE NOTES



Entry	Variety	Class	Hermiston (Irrigated)		Pendleton-Ruggs	
			Stripe Rust 4/29/2016 GS 10-10.5 % Severity		Stripe Rust 4/29/2016 GS 7-8 % Severity	
1	BOBTAIL	SWW	0		1	
2	NORWEST 553	HRW	0		1	
3	LCS AZIMUT	HRW	0		4	
4	LCS COLONIA	HRW	0		0	
5	LCS EVINA	HRW	0		0	
6	LCS JET	HRW	2		7	
7	NSA 10-2196	HRW	2		8	
8	LCS AYMERIC	HRW	0		6	
9	NSA 11-8010	HRW	0		2	
10	HE 181/3	HRW	2		10	
11	WB ARROWHEAD	HRW	0		9	
12	KELDIN	HRW	26		28	
13	WB 4623 CLP	HRW	4		21	
14	WHETSTONE	HRW	10		21	
15	SY TOUCHSTONE (04 PN 028B-3)	HRW	0		3	
16	CLEARSTONE CL2	HRW	21		20	
17	WA 8248	HRW	0		4	
18	WA 8249	HRW	1		0	
19	BRAWL CL+	HRW	51		68	
20	DENALI	HRW	58		58	
21	AVERY	HRW	86		58	
22	OR 2120012R	HRW	2		10	
23	ANTERO	HWW	43		36	
24	UI SILVER	HWW	13		19	
25	IDO 1101	HWW	39		33	
26	OR 2110664	HWW	5		8	
27	OR 2110679	HWW	0		7	
28	OR 2111025	HWW	0		9	
29	OR 2120276H	HWW	4		6	
30	OR 2120311H	HWW	3		3	
	Site Average		12		15	
	LSD (0.05)		14		6	
	CV (%)		80		30	



2016 OREGON SOFT WINTER ELITE YIELD TRIALS
DISEASE NOTES



Entry	Variety	Class	Hemiston (Irrigated)		Pendleton-Ruggs	
			Stripe Rust 4/29/2016 GS 10-10.5 % Severity		Stripe Rust 4/29/2016 GS 7-8 % Severity	
1	STEPHENS	SWW	11		30	
2	TUBES-06	SWW	18		39	
3	MARY	SWW	21		48	
4	KASERBERG	SWW	9		29	
5	ROSALYN	SWW	0		13	
6	BOBTAIL	SWW	0		0	
7	U/WSU HUFFMAN	SWW	2		8	
8	IDN 02-29001A	SWW	3		0	
9	IDN 07-28017B	SWW	1		1	
10	IDN 06-18302A	SWW	3		6	
11	IDO 1108	SWW	3		16	
12	LCS ARTDECO	SWW	24		24	
13	LCS BIANCOR	SWW	0		1	
14	LCS DRIVE	SWW	0		0	
15	LWW 14-73363	SWW	0		0	
16	LWW 14-71032	SWW	5		19	
17	LWW 14-71195	SWW	1		8	
18	WB 1529	SWW	3		35	
19	WB 1604	SWW	1		3	
20	EXP 826W09-471	SWW	1		11	
21	EXP 826W09-489	SWW	3		19	
22	SY 107	SWW	33		40	
23	SY OVALION	SWW	14		45	
24	SY ASSURE (SY 04 PN096-2)	SWW	0		6	
25	SY 04 PN066-7 (EXP)	SWW	3		16	
26	SY 09 PN077-23 (EXP)	SWW	0		14	
27	SY 09 PN062#18 (EXP)	SWW	3		21	
28	SY 09 PN009#25 (EXP)	SWW	0		1	
29	JASPER	SWW	2		24	
30	WA 8232	SWW	0		10	
31	WA 8206	SWW	5		18	
32	ARS 06134-97C	CLUB	16		19	
33	20060126-95C	CLUB	1		2	
34	OR 2101043	SWW	3		2	
35	OR 2110526	SWW	1		13	
36	OR 2121086	SWW	0		2	
37	OR 2121252	SWW	8		9	
38	LOR 833	SWW	2		4	
39	LOR 334	SWW	3		15	
40	Norwest Duert (LOR 092)	SWW	1		9	
	Site Average		5		14	
	LSD (0.05)		6		8	
	CV (%)		82		39	

Included below are Dr. Xianming Chen's winter wheat ratings:

From Dr. Xianming Chen, USDA - ARS

Table 1. Infection types, severity (%), and ratings of stripe rust on entries in the 2016 winter wheat variety trial nurseries at Walla

Ext Seq #	Variety	Class	2016 PLOT	#####		###		Reaction category*	Rating**
				elongation	%	IT	%		
12	AP503 CL2	HRW	12	8	5	7	15	MR-MS	5
98	AP700 CL	SWW	105	3	2	2	2	R	1
60	ARS-Crescent	WC	65	8	5	3	20	R	3
104	ARS-Selbu	SWW	111	0	0	2	2	R	1
13	Bauermeister	HRW	13	2	2	8	30	MS	6
91	Bobtail	SWW	97	0	0	2	5	R	1
78	Bruehl	WC	84	2	2	2	2	R	1
105	Cara	WC	112	0	0	0	0	R	1
77	Coda	WC	83	2	2	2-3	15	R	2
62	CuriosityCL+	SWWI	67	0	0	7	20	MS	6
14	Earl	HWW	14	3	2	0,8	0,5	R	2
79	Eltan	SWW	85	0	0	5	30	MR	4
39	Esperia	HRW	40	8	2	5	40	MR	4
15	Famum	HRW	15	0	0	2	2	R	1
16	Finley	HRW	16	8	5	2	10	R	2
55	IDO1108DH	SWW	59	0	0	2	10	R	2
63	Jasper	SWW	68	0	0	0,5	0,20	MR	2
3	Keldin	HRW	3	5	2	7	40	MS	7
33	LCS Aymeric		34	0	0	0,8	0,5	R	2
1	LCS Colonia	HRW	1	0	0	0	0	R	1
35	LCS Evina	HRW	36	2	2	0	0	R	1
2	LCS Jet (NSA10-7208)	HRW	2	0	0	0,8	0,30	R	2
88	LCS-Artdeco	SWW	94	5	2	3	25	MR	3
25	LCS-Azimut	HRW	26	0	0	0	0	R	1
52	Legion	SWW	56	2	2	0	0	R	1
42	LOR-092		44	2	2	2	5	R	3
61	Madsen	SWW	66	2	2	0,5	0,10	R	2
40	Mandala		42	8	15	2	5	R	1
50	Mary	SWW	54	0	0	5	40	MR	4
81	Masami	SWW	87	2	2	2-5	10	R	2
65	MelaCL+	SWWI	70	2	2	7	20	MS	6
27	Norwest 553	HRW	28	0	0	0	0	R	1
51	ORCF-102	SWWI	55	0	0	8	40	MS	7
71	ORCF-103	SWWI	76	8	5	5	30	MR	4
82	Otto	SWW	88	2	2	2	5	R	1
66	Puma	SWW	71	3	2	3	15	R	2
41	Rebaldi		43	2	2	0	0	R	2
93	Rosalyn	SWW	99	8	5	2	2	R	1
95	Skiles	SWW	102	0	0	2	2	R	1
53	SY 107	SWW	57	8	20	5	40	MR	4
8	SY Clearstone CL2	HRW	8	8	5	3-5	30	MR	4
99	SY Ovation	SWW	106	0	0	3	15	R	2
56	UI Castle CL+	SWWI	60	0	0	0,8	0,20	MR	2
57	UI Magic CL+	SWWI	62	0	0	3	15	R	2
58	UI Palouse CL+	SWWI	63	0	0	3	10	R	2
59	UI-WSU Huffman (IDN-0	SWW	64	0	0	5	10	MR	3
45	WB 1376CLP	SWW	47	0	0	2	2	R	6
46	WB 1529	SWW	50	5	5	5	25	MR	4
47	WB 1604	SWW	51	0	0	0	0	R	1
70	WB 1843	SWW	75	3	2	8	60	S	8
36	WB 4059		37	0	0	8	80	S	8
117	WB 456	SWW	125	0	0	2,8	2,30	R	2
89	WB 523	SWW	95	0	0	3	15	R	2
90	WB 528	SWW	96	8	5	0,8	0,15	R	2
4	WB-Arrowhead	HRW	4	0	0	2	2	R	1
48	WB-Junction	SWW	52	8	10	8	20	MS	6
29	WB-Rimrock	HRW	30	2	2	8	50	MS	7
9	Whetstone	HRW	9	5	2	2-3	10	R	2
67	Xerpha	SWW	72	8	10	8	60	S	8

* R = resistant, MR = moderately resistant, MS = moderately susceptible, and S = susceptible.

** 1 = most resistant and 9 = most susceptible.

These are the results from Dr. Xianming Chen, USDA-ARS in Pullman, WA: (I included the SR race structure common in the western states, 2015)

VT	ENTRY	NAME	ID	CLASS	Field summary ¹	Overall rating ¹
60	Soft Alzada (durum)	Durum	2050 HR Spring Wheat	MR	3	
46	Alum (WA 8166)	HRS	2036 HR Spring Wheat	MR	4	
35	Bullseye	HRS	2025 HR Spring Wheat	MR-MS	5	
47	Chest (WA 8165)	HRS	2037 HR Spring Wheat	MR	3	
49	Glee	HRS	2039 HR Spring Wheat	MR	3	
50	Hollis	HRS	2040 HR Spring Wheat	MS	6	
40	Jefferson	HRS	2030 HR Spring Wheat	MS	7	
51	Kelso	HRS	2041 HR Spring Wheat	MS	6	
27	LCS Iron	HRS	2017 HR Spring Wheat	R	1	
31	LCS-Buck Pronto	HRS	2021 HR Spring Wheat	MS	6	
52	Scarlet	HRS	2042 HR Spring Wheat	MS	7	
61	SY Basalt	HRS	2051 HR Spring Wheat	R	2	
36	SY Steelhead	HRS	2026 HR Spring Wheat	MR	4	
42	WB9229	HRS	2032 HR Spring Wheat	R	1	
43	WB9518	HRS	2033 HR Spring Wheat	R	1	
44	WB9668	HRS	2034 HR Spring Wheat	R	1	
37	SY605 CL	HRSI	2027 HR Spring Wheat	S	9	
45	WB9879CLP	HRSI	2035 HR Spring Wheat	MS	6	
48	Dayn	HWS	2038 HR Spring Wheat	R	2	
30	LCS-Atomo	HWS	2020 HR Spring Wheat	MR-MS	5	
32	LCS-Star	HWS	2022 HR Spring Wheat	R	1	
41	LI-Platinum	HWS	2031 HR Spring Wheat	MR	4	
13	JD	SC	2015 SW Spring Wheat	R	1	
17	Melba (WA 8193)	SC	2015 SW Spring Wheat	MR	3	
11	Babe	SWS	2015 SW Spring Wheat	S	8	
12	Diva	SWS	2015 SW Spring Wheat	MR	3	
14	Louise	SWS	2015 SW Spring Wheat	MR	3	
15	Seahawk (WA 8162)	SWS	2015 SW Spring Wheat	R	1	
7	LI-Stone	SWS	2015 SW Spring Wheat	MR-MS	5	
4	Whit	SWS	2015 SW Spring Wheat	MR	4	
9	WB6121	SWS	2015 SW Spring Wheat	R	2	
10	WB6341	SWS	2015 SW Spring Wheat	MR-MS	5	
8	WB-1035CL+	SWSI	2015 SW Spring Wheat	MS	7	

¹ Infection Type (IT) was recorded based on the 0-9 scale with ITs 8 and 9 combined as 8 (the most susceptible reaction) in field data. Generally IT 0-3 are considered resistant, 4-6 intermediate, and 7-9 susceptible. Heterogenous reactions of an entry were indicated by two or more ITs separated by "*" for most plants with the first IT and few plants with the second IT or connected with "-" for entries containing plants with continuous ITs.

² Entries with a high IT in the first note, but a low IT in the second note at Mt. Vernon may indicate that they have high-temperature, adult-plant (HTAP) resistance.

³ R = resistant, MR = moderately resistant, MS = moderately susceptible, and S = susceptible.

⁴ 1 = most resistant and 9 most susceptible.

Note: The summary and ratings are based on the highest IT and % severity to discourage use of race-specific resistance.

Thank you,

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