



2019 PACIFIC NORTHWEST CROP QUALITY REPORT

WEEK 7 **FINAL**: September 12, 2019

This is the final weekly report for the 2019 Pacific Northwest wheat harvest survey. We have received and tested 728 samples. Sincere gratitude is extended to all who are involved with this year's sample collection, the Federal Grain Inspection Service Portland Field Office for grading, and the PNW wheat growers and PNW state and private grain inspection organizations for their generous cooperation in the sample collection. Special thanks go to Idaho Wheat Commission, Oregon Wheat Commission, and Washington Grain Commission for funding this project.

Of the 728 samples received this year, 439 were soft white (SWH), 113 were white club (WHCB), 104 were hard red winter (HRW), 59 were hard red spring (HRS), 10 were hard white (HDWH), two were western white wheat (WWH), and one was mixed wheat (XWHT).

Soft white wheat crop weighted averages had the following differences when compared to 2018. Test weight was slightly lower at 61.6 lb/bu (81.0 kg/hl). Wheat moisture content increased to 9.9% from 8.6% last year. Wheat protein (12% mb) increased to 10.0% from 9.3% last year. Falling number value (14% mb) was 307 seconds. Thousand kernel weight (14% mb) increased slightly from last year and kernel size remained the same as last year. Kernel hardness was lower and wheat ash content was slightly lower than last year.

White club wheat crop weighted averages had the following differences from 2018. Test weight decreased to 60.6 lb/bu (79.7 kg/hl) from 61.2 lb/bu (80.5 kg/hl) last year. Wheat moisture increased to 9.3% from 8.1% last year. Wheat protein (12% mb) increased to 9.8% from 9.0% last year. Falling number value (14% mb) was 314 seconds. Whole meal wet gluten (14% mb) increased to 21.5% from 15.8% last year.

Hard red winter wheat crop weighted averages had the following highlights when compared to 2018. Test weight slightly decreased to 62.6 lb/bu from 62.9 lb/bu last year. Wheat moisture increased to 9.6% from 8.3% last year. Wheat protein (12% mb) increased to 11.4% from 11.1% last year, falling number value (14% mb) decreased to 346 seconds from 365 seconds last year. Whole meal wet gluten increased slightly to 25.9% from 25.1% last year, and thousand kernel weight (14% mb) and kernel size were lower than last year.

Hard red spring wheat crop weighted averages follow similar trends as HRW with increased test weight, increased moisture, and increased wheat protein, .

Thank you all for your support. We have started to make SWH and WHCB composites to perform various flour and finished product tests for US Wheat Associates' 2019 Crop Quality Report as well as 2019 U.S. Pacific Northwest Soft White Wheat Quality Report.



BY USDA ECONOMIC STATISTICS DISTRICTS

Table 1

2019 CROP WEEK 7 Final September 12, 2019																					
Class	District	Number of Samples	Grading Data									Quality Data									
			Test Weight (lb/bu)	Test Weight (kg/hl)	Dockage (%)	Heat Damage (%)	Total Damage (%)	Foreign Material (%)	Shrunk & Broken (%)	Total Defects (%)	Moisture (%)	Protein (% 12% mb)			Falling Number (s. 14%mb)	Thousand Kernel Weight (g. 14% mb)	Kernel Hardness (20 to 120)	Kernel Size (mm)	Ash (% 14% mb)	Wet Gluten (% 14% mb)	
												Average	Low	High							
SWH	1 2	11	59.5	78.3	0.4	0.0	0.0	0.0	0.0	0.5	0.6	11.7	8.5	7.6	9.7	301	40.0	15.4	2.86	1.40	18.2
SWH	3	2	61.0	80.2	0.3	0.0	0.0	0.0	0.7	0.7	10.6	9.1	8.8	9.4	271	44.4	23.8	2.97	1.57	21.0	
SWH	4	60	61.4	80.7	0.5	0.0	0.0	0.0	0.4	0.5	10.3	10.1	6.9	13.0	300	35.8	20.6	2.78	1.32	24.5	
SWH	5	26	60.9	80.1	0.5	0.0	0.0	0.2	0.5	0.7	9.6	9.9	7.3	11.2	314	36.6	19.7	2.81	1.42	23.3	
SWH	6 7	22	61.1	80.4	0.7	0.0	0.0	0.2	0.6	0.8	10.1	10.4	8.0	13.6	295	34.8	22.8	2.70	1.27	25.8	
SWH	8	117	61.6	81.0	0.4	0.0	0.0	0.0	0.5	0.6	9.4	10.2	7.7	15.9	297	35.0	24.3	2.71	1.28	25.0	
SWH	9	13	60.5	79.5	0.4	0.0	0.0	0.1	1.0	1.1	8.8	10.6	8.6	15.9	303	31.0	29.4	2.64	1.38	26.9	
SWH	10	70	62.4	82.0	0.4	0.0	0.0	0.0	0.4	0.4	9.6	10.2	8.6	12.2	315	36.8	23.5	2.79	1.29	24.7	
SWH	11	60	62.6	82.3	0.6	0.0	0.0	0.0	0.4	0.4	10.4	10.1	9.8	8.2	319	36.2	23.7	2.78	1.36	22.3	
SWH	12	6	60.6	79.8	0.7	0.0	0.3	0.5	0.2	1.0	9.6	9.2	8.5	9.7	262	45.4	19.3	2.99	1.55	21.1	
SWH	13	12	62.4	82.1	0.2	0.0	0.0	0.0	0.2	0.2	10.1	9.1	7.7	10.8	339	41.2	31.1	2.88	1.52	18.1	
SWH	14	40	61.1	80.3	0.4	0.0	0.1	0.0	0.3	0.4	10.5	10.3	8.2	13.1	326	39.4	26.0	2.84	1.56	22.7	
	Crop Year Average																				
SWH	2019	439	61.6	81.0	0.5	0.0	0.0	0.0	0.5	0.5	9.9	10.0			307	36.4	23.4	2.77	1.35	23.9	
SWH	2018	473	61.7	81.1	0.5	0.0	0.0	0.0	0.5	0.6	8.6	9.3			315	35.7	27.2	2.77	1.36	20.6	
WHCB	4	2	61.4	80.7	0.6	0.0	0.0	0.1	1.1	1.2	9.9	9.6	8.5	10.7	348	31.0	26.7	2.60	1.28	21.2	
WHCB	5	1	61.5	80.9	0.5	0.0	0.0	0.0	0.4	0.4	9.9	9.1	9.1	9.1	268	39.8	25.5	2.54	1.21	15.8	
WHCB	6 7	4	58.7	77.2	0.7	0.0	0.0	0.1	1.4	1.5	9.8	9.6	8.2	10.3	284	32.6	18.0	2.52	1.32	21.3	
WHCB	8	85	60.5	79.6	0.8	0.0	0.0	0.0	1.2	1.2	9.1	10.0	7.8	13.0	311	31.4	20.1	2.53	1.28	23.0	
WHCB	10	7	60.7	79.8	0.7	0.0	0.0	0.5	1.3	1.8	8.9	10.3	8.0	12.7	311	28.3	28.9	2.49	1.30	24.5	
WHCB	11	14	61.1	80.3	0.7	0.0	0.0	0.0	1.0	1.0	10.8	8.8	7.6	9.9	344	29.1	23.7	2.60	1.36	11.2	
	Crop Year Average																				
WHCB	2019	113	60.6	79.7	0.8	0.0	0.0	0.1	1.2	1.2	9.3	9.8			314	31.0	21.2	2.54	1.29	21.5	
WHCB	2018	128	61.2	80.5	0.5	0.0	0.0	0.1	0.8	0.9	8.1	9.0			316	32.8	27.9	2.62	1.29	15.8	
HRW	4	6	61.9	81.4	0.8	0.0	0.0	0.1	0.5	0.6	9.3	11.8	8.4	13.9	327	32.2	61.6	2.76	1.38	27.9	
HRW	5	4	63.2	83.0	0.4	0.0	0.1	0.0	0.2	0.3	9.5	12.5	11.6	13.7	328	39.9	61.5	3.02	1.50	29.9	
HRW	6 7	8	63.1	82.9	0.3	0.0	0.0	0.0	0.2	0.3	10.9	11.9	10.8	12.8	366	37.8	69.8	2.84	1.27	30.3	
HRW	8	23	62.1	81.7	0.5	0.0	0.0	0.0	0.6	0.6	9.4	12.1	10.1	14.8	357	36.2	59.7	2.85	1.35	29.1	
HRW	10	17	63.2	83.0	0.4	0.0	0.0	0.0	0.5	0.6	9.5	11.1	9.4	12.6	344	35.6	64.7	2.85	1.29	24.6	
HRW	11	37	62.9	82.7	0.3	0.0	0.0	0.0	0.5	0.5	9.7	10.7	9.4	13.1	338	36.5	63.0	2.89	1.32	22.7	
HRW	13	4	62.2	81.7	0.1	0.0	0.0	0.0	0.3	0.3	8.4	12.0	11.9	12.2	380	37.4	67.4	2.96	1.42	28.6	
HRW	14	6	60.1	79.1	0.6	0.0	0.0	1.0	1.1	2.1	9.5	11.3	10.5	12.0	336	34.9	69.0	2.89	1.46	25.7	
	Crop Year Average																				
HRW	2019	105	62.6	82.2	0.4	0.0	0.0	0.1	0.5	0.6	9.6	11.4			346	36.2	63.4	2.87	1.34	25.9	
HRW	2018	112	62.9	82.7	0.3	0.0	0.0	0.0	0.5	0.5	8.3	11.1			365	36.7	65.3	2.92	1.38	25.1	
HRS	3	1	62.6	82.3	0.5	0.0	0.0	0.0	0.6	0.6	11.8	12.4	12.4	12.4	359	35.4	59.8	2.89	1.67	33.1	
HRS	4	3	63.2	83.1	0.2	0.0	1.1	0.1	0.3	1.4	9.1	13.8	13.2	14.5	371	36.0	66.7	2.90	1.52	34.7	
HRS	6 7	4	63.3	83.1	0.6	0.0	0.0	0.0	0.3	0.3	10.0	14.7	13.9	16.0	387	38.2	63.6	2.94	1.42	39.9	
HRS	8	18	63.2	83.0	0.4	0.0	0.0	0.1	0.6	0.7	9.1	14.6	12.5	16.2	342	34.4	65.9	2.85	1.63	39.7	
HRS	10	11	63.2	83.1	0.4	0.0	0.0	0.1	0.8	0.8	9.1	14.4	12.9	15.7	385	31.4	69.8	2.74	1.50	34.4	
HRS	11	11	62.5	82.1	0.3	0.0	0.0	0.0	0.5	0.5	9.9	13.9	11.8	15.6	352	27.7	72.4	2.62	1.49	33.2	
HRS	13	2	63.4	83.3	0.3	0.0	0.0	0.2	0.5	0.7	11.1	14.4	13.5	15.3	436	33.2	75.1	2.80	1.67	35.4	
HRS	14	8	62.6	82.3	0.4	0.0	0.0	0.1	0.8	0.9	11.0	14.9	14.3	15.5	409	33.5	72.9	2.83	1.68	36.9	
	Crop Year Average																				
HRS	2019	58	63.0	82.8	0.4	0.0	0.1	0.0	0.6	0.7	9.7	14.4			369	32.8	69.0	2.79	1.57	36.6	
HRS	2018	95	62.6	82.3	0.4	0.0	0.0	0.0	0.8	0.8	8.7	14.1			386	32.3	72.2	2.77	1.56	35.0	



Revised

BY PRODUCTION ZONES

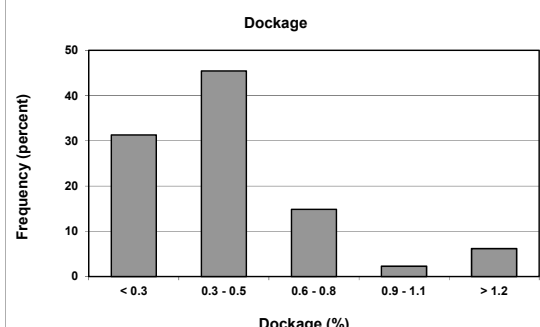
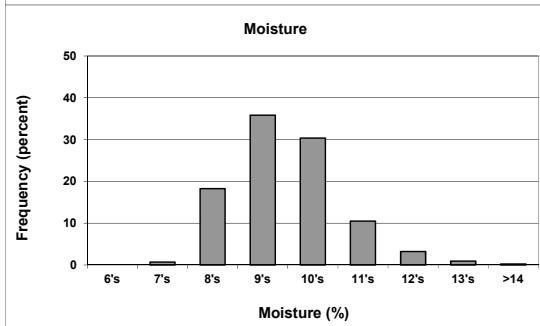
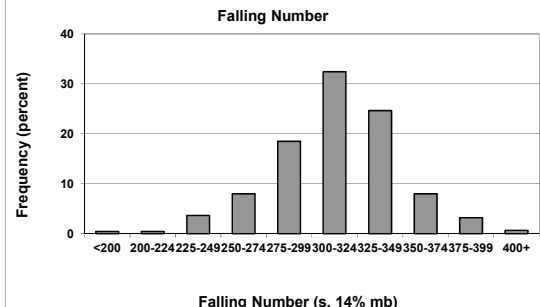
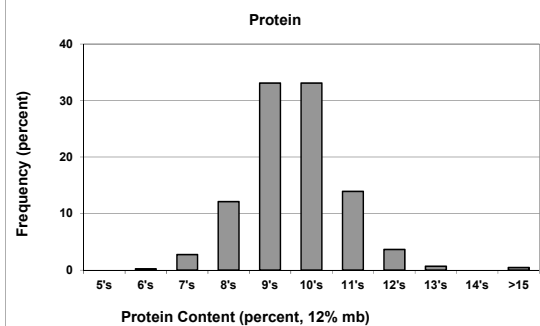
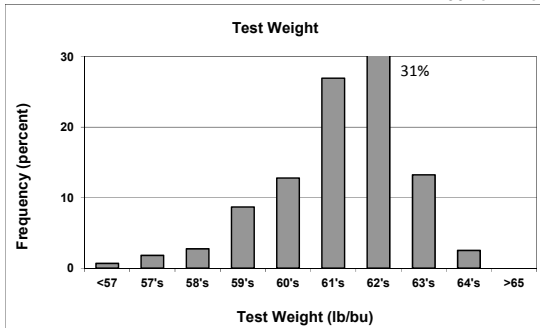
Table 2

2019 CROP WEEK 7 Final September 12, 2019																					
Class	District	Number of Samples	Grading Data										Quality Data								
			Test Weight (lb/bu)	Test Weight (kg/hl)	Dockage (%)	Heat Damage (%)	Total Damage (%)	Foreign Material (%)	Shrunk & Broken (%)	Total Defects (%)	Moisture (%)	Protein (% 12% mb)			Falling Number (s, 14%mb)	Thousand Kernel Weight (g, 14% mb)	Kernel Hardness (-20 to 120)	Kernel Size (mm)	Ash (% 14% mb)	Wet Gluten (% 14% mb)	
												Average	Low	High							
SWH	NC	145	61.7	81.1	0.4	0.0	0.0	0.0	0.0	0.5	0.6	9.4	10.2	7.7	15.9	305	35.2	24.3	2.73	1.28	25.1
SWH	NE	119	62.3	81.9	0.5	0.0	0.0	0.0	0.0	0.4	0.5	9.9	10.1	8.2	15.9	316	35.9	23.8	2.77	1.33	23.8
SWH	C	103	61.2	80.5	0.5	0.0	0.0	0.1	0.1	0.5	0.6	10.1	10.0	6.9	13.0	306	35.8	20.9	2.78	1.35	24.3
SWH	SW	11	59.5	78.3	0.4	0.0	0.0	0.0	0.0	0.5	0.6	11.7	8.5	7.6	9.7	301	40.0	15.4	2.86	1.40	18.2
SWH	SE	60	61.3	80.6	0.4	0.0	0.1	0.1	0.3	0.4	10.4	9.9	7.7	13.1	318	40.5	26.3	2.87	1.55	21.6	
	Crop Year Average																				
SWH	2019	438	61.6	81.0	0.5	0.0	0.0	0.0	0.0	0.5	0.5	9.9	10.0			307	36.4	23.4	2.77	1.35	23.9
SWH	2018	473	61.7	80.9	0.5	0.0	0.0	0.0	0.0	0.5	0.6	8.6	9.3			315	35.7	27.2	2.77	1.36	20.6
WHCB	NC	90	60.5	79.6	0.8	0.0	0.0	0.0	1.2	1.2	9.1	10.0	7.8	13.0	310	31.5	20.2	2.53	1.28	23.1	
WHCB	NE	19	60.9	80.1	0.7	0.0	0.0	0.2	1.1	1.3	10.3	9.3	7.6	12.7	337	28.4	25.3	2.56	1.35	14.9	
WHCB	C	4	60.9	80.0	0.5	0.0	0.0	0.0	0.8	0.8	9.8	9.1	8.2	10.7	305	34.5	24.0	2.60	1.28	18.1	
	Crop Year Average																				
WHCB	2019	113	60.6	79.7	0.8	0.0	0.0	0.1	1.2	1.2	9.3	9.8			314	31.0	21.2	2.54	1.29	21.5	
WHCB	2018	128	61.2	80.5	0.5	0.0	0.0	0.1	0.8	0.9	8.1	9.0			316	32.8	27.9	2.62	1.29	15.8	
HRW	NC	31	62.3	81.9	0.5	0.0	0.0	0.0	0.5	0.6	9.7	12.1	10.1	14.8	360	36.1	62.4	2.83	1.34	29.4	
HRW	NE	44	63.1	82.9	0.3	0.0	0.0	0.0	0.4	0.4	9.7	10.7	9.4	12.4	334	36.9	62.1	2.89	1.28	22.6	
HRW	C	14	62.7	82.4	0.5	0.0	0.0	0.0	0.5	0.6	9.6	12.0	8.4	13.9	329	35.6	62.7	2.86	1.37	28.1	
HRW	SE	16	61.5	80.9	0.4	0.0	0.0	0.4	0.7	1.1	9.1	11.7	10.5	13.1	367	35.2	69.7	2.88	1.47	26.5	
	Crop Year Average																				
HRW	2019	105	62.6	82.2	0.4	0.0	0.0	0.1	0.5	0.6	9.6	11.4			346	36.2	63.4	2.87	1.34	25.9	
HRW	2018	112	62.9	82.7	0.3	0.0	0.0	0.0	0.5	0.5	8.3	11.1			365	36.7	65.3	2.92	1.38	25.1	
HRS	NC	24	63.3	83.1	0.4	0.0	0.0	0.0	0.7	0.7	9.2	14.5	12.5	16.2	351	34.7	66.3	2.85	1.57	38.9	
HRS	NE	19	62.7	82.4	0.3	0.0	0.0	0.0	0.5	0.6	9.5	14.1	11.8	15.7	369	28.8	71.5	2.66	1.51	33.4	
HRS	C	4	63.2	83.1	0.4	0.0	0.8	0.1	0.3	1.1	9.3	14.4	13.2	16.0	362	37.3	64.2	2.93	1.51	38.3	
HRS	SE	11	62.8	82.5	0.4	0.0	0.0	0.1	0.7	0.8	11.1	14.6	12.4	15.5	408	33.6	72.1	2.83	1.68	36.3	
	Crop Year Average																				
HRS	2019	58	63.0	82.8	0.4	0.0	0.1	0.0	0.6	0.7	9.7	14.4			369	32.8	69.0	2.79	1.57	36.6	
HRS	2018	95	62.6	82.3	0.4	0.0	0.0	0.0	0.8	0.8	8.7	14.1			386	32.3	72.2	2.77	1.56	35.0	

Distributions

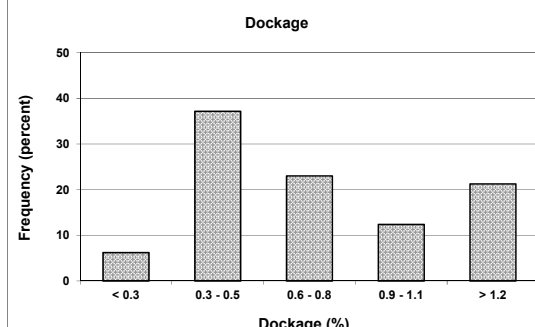
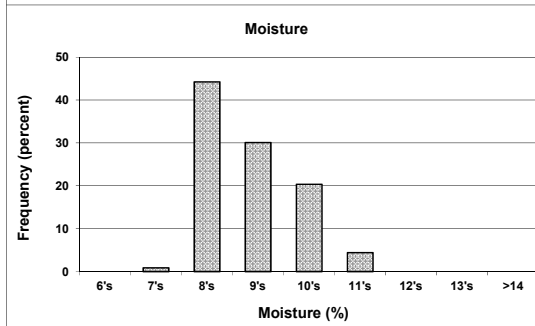
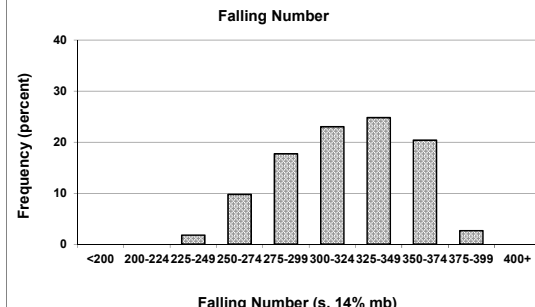
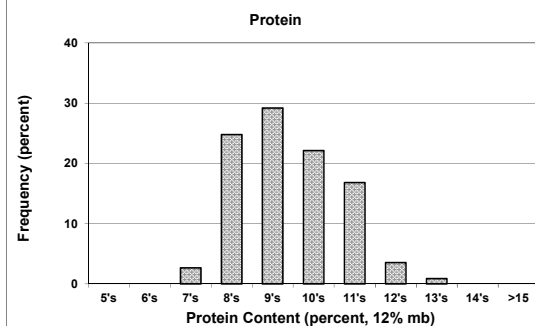
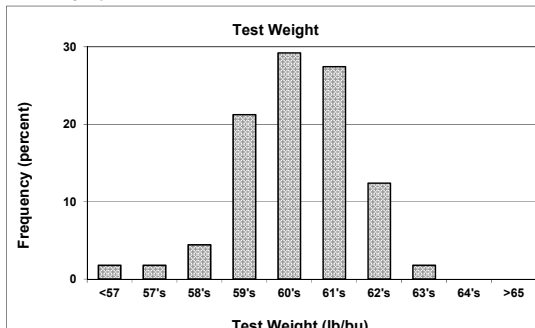
SOFT WHITE WHEAT

439 SAMPLES



WHITE CLUB WHEAT

113 SAMPLE



Prepared by: Wheat Marketing Center, Portland, Oregon