

Table S1. Mean of tested traits of sixty-four wheat genotypes under normal and heat stress conditions

Geno- type #	Grain yield (t/ ha)		GW (g)		PC (%)		MC (%)		ZT (cm ³)		WA (%)		GH (%)		LV (ml)		STI
	Normal	Stress	Normal	Stress	Normal	Stress	Normal	Stress	Normal	Stress	Normal	Stress	Normal	Stress	Normal	Stress	
1	3.365	2.358	32.08	25.00	12.20	12.50	13.45	13.08	49.75	49.75	70.15	66.58	54.43	52.73	669.8	758.3	0.428
2	4.428	2.460	35.23	27.09	12.18	12.88	13.75	13.05	50.50	55.50	69.20	70.25	53.78	56.33	692.8	729.8	0.590
3	4.553	2.700	38.98	30.23	11.68	13.00	14.00	13.05	44.50	50.00	67.43	69.83	53.13	56.33	693.0	766.8	0.665
4	4.645	1.815	36.68	27.00	11.85	13.35	14.28	12.70	49.50	58.25	65.88	69.18	49.10	55.25	658.0	776.3	0.455
5	4.293	2.553	36.64	26.63	12.28	13.10	13.98	13.18	51.50	52.70	67.20	68.10	51.68	52.75	719.8	789.8	0.593
6	4.860	2.530	39.68	30.31	11.55	12.25	13.80	12.95	49.25	50.25	59.90	62.85	45.70	52.00	573.0	666.5	0.658
7	4.793	2.003	33.18	23.50	11.85	12.68	13.83	13.23	46.75	44.75	64.73	67.68	51.93	53.58	700.3	770.8	0.503
8	4.640	1.895	40.60	28.00	11.00	13.48	14.43	12.80	34.00	57.00	64.73	68.08	52.53	53.98	628.3	812.3	0.470
9	2.678	1.380	32.14	20.53	11.73	14.10	13.18	12.78	50.00	58.00	63.23	70.13	52.70	55.93	651.5	781.0	0.200
10	4.278	2.173	35.78	26.00	11.90	13.25	13.98	13.30	48.50	61.75	69.10	71.25	54.43	56.58	644.3	791.5	0.500
11	4.568	2.518	39.38	30.75	11.83	12.60	13.65	13.43	45.50	48.50	67.00	67.70	50.00	52.70	630.3	756.5	0.620
12	3.920	2.163	38.93	29.00	11.80	14.15	13.63	13.05	45.00	52.50	65.25	68.38	52.33	60.58	676.8	871.0	0.455
13	3.883	1.528	40.28	28.09	12.23	13.35	14.00	13.08	47.25	50.50	67.55	69.20	54.00	55.53	732.8	825.3	0.315
14	3.670	2.113	39.09	29.00	11.40	12.33	13.95	13.08	35.75	45.25	60.43	64.00	46.35	49.58	601.8	726.3	0.418
15	4.100	2.420	37.01	28.50	12.30	12.65	13.75	13.20	51.50	48.50	69.40	69.35	56.55	55.05	729.3	796.0	0.535
16	4.527	2.300	40.84	31.06	11.38	12.58	14.63	13.03	45.50	52.00	66.60	69.80	53.00	56.35	666.0	735.8	0.563
17	4.493	2.433	37.86	29.69	11.65	13.03	14.55	13.28	45.75	49.75	67.78	68.53	52.00	53.38	661.0	789.3	0.588
18	3.600	2.180	40.00	32.00	11.85	12.63	14.18	12.93	40.50	40.50	67.65	68.38	51.63	55.93	702.0	802.0	0.423
19	3.378	1.695	37.63	28.00	12.08	13.70	13.83	12.58	52.50	58.75	65.88	69.75	53.58	54.85	710.5	782.3	0.308
20	3.490	1.843	38.38	30.00	11.65	13.70	14.10	12.83	38.25	64.50	68.65	75.83	53.60	59.73	682.0	791.5	0.348
21	3.180	2.643	30.00	28.34	12.05	12.88	14.15	13.10	46.25	52.75	63.58	68.25	46.13	53.98	687.5	763.8	0.455
22	3.755	2.075	35.11	26.93	11.85	13.33	14.38	12.95	40.00	49.00	66.48	69.45	51.90	55.70	715.0	845.0	0.423
23	4.145	1.955	37.95	27.00	11.85	13.08	14.38	13.28	50.00	63.50	67.60	71.25	52.53	57.40	668.3	771.5	0.438
24	5.175	2.143	36.90	27.52	11.63	12.50	14.10	13.03	48.75	60.00	59.65	64.78	42.90	50.80	580.8	689.3	0.598
25	4.643	1.760	38.59	27.00	11.38	13.58	13.98	12.83	46.00	52.00	65.85	67.28	53.35	53.35	659.8	849.0	0.440
26	3.335	2.160	34.00	26.21	11.88	13.35	14.00	13.23	43.25	50.25	66.18	69.35	51.00	54.63	702.0	824.8	0.390
27	3.995	2.090	36.19	28.38	11.90	13.70	14.15	12.78	48.00	56.25	68.83	69.35	55.68	56.78	717.5	848.3	0.450
28	4.775	2.518	43.54	33.00	12.00	13.23	14.75	13.00	48.25	49.75	68.50	69.88	52.00	55.48	686.0	7385.0	0.650
29	3.570	1.903	38.48	29.32	11.70	13.28	13.70	13.18	42.50	57.75	69.65	71.83	56.60	58.05	698.5	837.0	0.370
30	3.508	2.175	36.45	28.00	12.13	13.10	13.95	13.15	45.50	41.00	67.68	65.30	53.23	49.73	718.0	843.0	0.413
31	3.985	1.825	34.50	24.00	12.35	12.95	14.28	13.05	50.25	51.75	68.78	68.38	53.58	54.63	721.8	775.0	0.393
32	4.550	2.063	38.90	28.00	12.60	13.60	14.43	12.80	58.00	62.50	67.50	70.55	53.15	57.18	735.0	817.3	0.500

33	5.425	2.013	40.61	28.00	11.75	13.13	14.25	12.88	47.25	57.00	65.70	73.85	54.00	58.68	679.5	705.0	0.590
34	3.545	1.623	41.83	28.77	12.03	13.43	13.90	12.83	50.00	58.25	66.90	71.08	54.20	57.15	708.0	813.0	0.313
35	3.448	2.060	40.08	29.93	11.98	13.80	14.35	12.65	48.75	59.00	70.50	74.68	54.63	58.45	685.5	789.5	0.383
36	4.583	1.548	36.83	27.00	12.05	13.73	14.48	13.08	51.75	60.00	68.10	70.30	53.53	56.35	692.3	796.0	0.383
37	4.743	1.775	32.96	23.50	12.35	13.30	14.23	12.85	49.75	57.00	68.40	72.23	51.88	57.40	715.8	790.3	0.458
38	3.990	1.630	32.71	23.37	12.33	13.00	14.18	13.30	50.50	52.25	65.93	68.20	50.40	55.53	724.3	720.3	0.353
39	5.450	1.133	40.58	26.30	11.53	13.08	14.25	13.08	45.00	58.00	69.98	70.50	55.50	55.90	649.5	769.5	0.335
40	3.758	1.123	35.12	26.54	11.93	14.20	14.55	12.73	46.75	56.75	72.63	73.05	57.43	58.70	727.3	878.8	0.225
41	4.410	1.630	36.06	22.30	11.33	13.60	14.85	12.68	42.25	55.50	67.15	71.98	54.93	57.55	711.5	837.0	0.388
42	4.550	1.570	41.66	25.41	11.53	13.78	13.90	12.38	45.00	60.25	66.48	73.75	53.38	59.10	612.3	767.5	0.385
43	4.295	1.888	36.40	26.89	11.80	12.98	14.18	12.75	48.75	48.25	66.85	66.63	53.58	51.65	690.0	764.3	0.440
44	3.815	1.658	34.13	24.75	11.48	13.33	14.30	12.65	40.75	50.25	66.58	68.10	52.30	55.23	682.0	835.3	0.343
45	3.780	1.855	34.68	23.00	12.03	13.58	14.23	12.55	49.00	55.00	69.80	69.53	55.70	56.13	707.5	777.0	0.378
46	4.345	1.763	34.65	23.00	11.63	12.43	14.43	12.98	48.75	58.75	63.45	65.10	46.68	50.18	586.8	648.0	0.415
47	5.485	1.740	39.32	26.68	11.73	12.83	14.48	12.90	48.50	55.00	68.88	70.18	55.70	56.58	677.0	688.3	0.515
48	5.335	1.595	39.04	26.00	11.80	13.50	13.85	12.78	48.25	58.50	67.13	69.78	55.05	54.43	682.0	774.0	0.460
49	4.005	1.145	41.94	26.50	12.18	13.40	13.75	12.95	49.75	51.75	69.13	68.70	56.48	54.85	760.5	833.5	0.245
50	4.875	1.708	40.65	27.50	11.15	13.15	14.65	13.38	35.50	49.00	66.03	69.13	52.70	54.43	650.8	813.3	0.453
51	5.155	1.505	39.35	24.70	12.10	13.60	14.25	12.98	48.25	51.75	68.88	70.28	55.28	55.08	733.8	846.0	0.420
52	4.375	1.665	40.79	25.00	11.88	13.90	14.40	13.00	47.25	56.25	69.38	72.90	56.35	58.23	715.0	881.0	0.393
53	4.440	1.448	38.75	24.00	11.70	14.98	15.13	12.93	44.00	65.75	69.00	73.55	54.85	58.45	758.3	887.0	0.348
54	4.680	1.540	45.46	29.00	11.65	13.48	14.40	13.03	46.25	57.75	68.63	69.98	54.23	56.95	646.0	851.3	0.390
55	5.163	1.460	42.07	26.00	11.20	13.60	14.65	12.80	38.75	59.25	66.78	70.18	54.43	56.35	710.5	823.0	0.405
56	4.700	1.365	38.80	25.50	11.88	13.15	14.23	12.98	47.50	56.25	68.50	70.40	55.30	55.70	641.5	753.0	0.348
57	5.405	2.255	43.14	26.00	11.50	13.38	14.58	13.05	39.75	40.50	66.55	66.98	54.43	52.53	742.0	877.5	0.660
58	3.490	1.453	38.73	24.11	12.20	14.25	13.78	12.55	49.25	55.25	66.43	71.25	52.10	56.75	692.8	844.5	0.270
59	4.548	1.730	38.90	25.50	12.05	13.38	14.60	12.90	51.25	56.00	70.73	68.25	56.13	54.63	622.0	834.8	0.425
60	4.458	1.723	37.73	27.00	11.38	14.10	14.78	13.10	44.25	59.75	66.50	70.63	54.25	58.25	665.5	833.0	0.415
61	5.050	2.028	43.30	26.30	11.15	12.58	14.08	12.93	40.25	53.75	59.10	62.33	43.40	46.35	556.0	651.5	0.553
62	4.183	1.485	38.68	26.50	11.98	14.08	14.40	12.88	51.00	63.25	64.78	70.58	50.38	56.33	663.5	812.5	0.335
63	4.733	1.625	45.34	27.80	11.73	13.40	14.50	12.50	51.25	63.00	63.13	66.03	47.83	51.23	618.0	764.5	0.413
64	4.455	1.433	39.08	27.75	12.55	13.60	14.30	13.43	56.50	61.25	71.18	71.40	56.75	58.25	659.0	765.8	0.345
Mean	4.30	1.88	38.13	26.95	11.83	13.30	14.19	12.96	46.59	54.64	67.07	69.40	52.78	55.35	679.4	791.1	
HSD	0.848	0.651	2.814	4.637	0.835	1.127	0.915	0.819	7.488	8.212	3.112	4.118	3.738	4.170	55.27	73.04	

Abbreviations represent as follows: GW: 1000 grain weight, PC: protein content, MC: moisture content, ZT: Zeleny sedimentation volume, WA: water absorption, GH: grain hardness, LV: loaf volume. STI: stress tolerance index.