

**Variations in micronutrients, bread quality and agronomic traits of wheat landrace varieties and commercial cultivars**

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**Supplementary Table 1.** Mean comparison of wheat genotypes for agronomic, bread- making quality traits and micronutrients.

Genotype	MA	GY	TGW	GH	HW	Glu	ZSV	Fe <sup>+2</sup>	Zn <sup>+2</sup>	SDS	Gpc
KC4840	205.66	10.83	42.46	50.67	80.59	16.12	15.33	44.02	24.04	46.6	10.4
KC126	210.33	7.13	37.2	45.67	79.94	15.82	13.66	31.88	23.77	45.3	10.4
KC4810	207.66	10.16	39.4	46	77.1	14.88	15.66	49.02	30.23	48.3	10.6
KC4793	208	10.66	36.96	40.67	79.23	17.77	10.33	46.82	34.37	55.6	12.0
KC4682	216.66	6.53	36.86	41.67	83.01	14.84	10.33	55.57	37.34	45.3	11.2
KC4575	208.66	9.93	36.83	44.33	81.26	16.58	16.66	39.41	27.33	54.0	11.8
KC4559	205.66	9.43	40.5	43.33	80.9	18.5	13.66	66.38	25.08	54.3	12.5
KC4858	202.66	11.6	40	44	82.16	16.39	14.66	64.16	32.72	54.0	11.4
KC4856	206.66	10.1	34.9	44	77.28	16.27	12.33	57.53	32.93	54.3	12.1
KC4848	209.33	10.7	40.53	48.33	79.66	17.0	16.0	55.52	30.83	56.6	11.6
KC4689	202.66	10.23	39.96	50	79.11	13.96	9.66	59.93	31.7	47.3	11.0
KC4644	208.66	9.63	36.5	47.33	74.61	16.26	12.33	55.39	36.15	49.6	10.9
KC4830	208	11.26	40.33	47	80.94	15.69	16.33	24.93	25.65	52.6	11.9
KC4634	207	10.13	39.13	48	76.78	18.33	16.33	61.01	18.68	54.6	11.7
KC4608	209.66	8.33	38.66	48.33	81.73	13.84	18.0	44.15	24.34	55.3	11.2
KC4674	210	8.9	29.46	42.66	78.56	15.85	16.33	47.02	32.33	55.6	11.7
KC4780	208	10.73	44.63	44.66	78.41	12.65	18	61.43	27.15	43.3	9.2
KC4631	209.33	8.86	36.46	42.33	82.26	15.77	16.33	38.04	28.67	47.0	10.2
KC4601	206.3	10.9	37.7	43.33	80.43	16.58	12.66	29.97	20.92	51.6	11.2
KC4820	204.33	10.5	38.46	41.3	78.4	15.8	15.66	26.2	27.1	48.20	12.0
KC4815	206	9.63	39.8	47.66	79.62	14.84	16	39.62	27.64	53.3	11.2
KC4570	202	9.36	35.6	45.33	83.44	14.89	11.66	62.09	35.51	53.0	11.5
KC4684	207.33	8.4	35.5	40.33	79.14	13.28	11.66	55.14	38.66	54.3	11.2
KC4800	211.33	9.8	39.83	44.66	82.69	17.24	14.33	41.23	24.63	52.3	11.3
KC4606	209	10.9	42.6	44.66	76.92	18.65	12.66	51.59	30.99	53.3	12.6
KC4558	202.33	10.66	42.86	44.33	82.04	18.8	18	60.49	20.85	54.3	12.7
KC4569	200.66	9.2	40.73	48.66	79.32	17.12	15.33	56.19	29.95	57.3	13.4
KC4818	203.66	9.5	39.26	48.66	80.72	15.37	16	29.11	22.06	44.6	10.2
KC4632	204.33	11.8	39.13	40.33	78.45	15.85	13.33	50.33	25.65	48.6	11.0
KC4580	210.33	6.2	36.03	53.33	77.08	13.89	13	61.26	25.6	50.6	11.0
KC4687	209.33	10.16	35.9	45.66	75.17	12.7	9.66	52.59	34.06	53.3	11.7
KC4779	211.33	10.5	41.86	46	78.18	11.19	15.33	46.59	23.62	53.3	11.4
KC4697	202.33	9.33	39.86	43.66	81.15	16.49	9.66	55.45	24.99	54.0	12.0
KC120	208.66	9.06	38.86	41	77.12	17.55	14.33	66.51	21.43	55.3	12.3
KC4803	202.66	9.8	38.26	47.66	81.6	18.25	14.66	52.06	24.25	52.3	10.9
KC4845	205.33	9.16	33.2	45.66	78.18	16.52	15.33	55.73	29.84	55.3	13.0

KC224	208.33	10.2	40.3	43.66	76.29	16.79	17.66	36.89	26.6	54.4	12.0
KC4585	206.6	6.3	38.5	43.66	82.03	18.13	10	57.96	32.74	51.0	12.4
KC4548	205.7	11.60	41.0	40.33	83.65	17.76	15.66	64.16	32.72	57.3	11.7
KC4703	208.33	11.1	37.06	48.33	80.79	14.3	11	58.59	31.21	46.3	9.8
KC4542	208.66	10.56	42.53	47.3	76.5	16.6	13.3	37.9	37.6	51.6	11.5
KC4696	209.33	10.96	35.8	47.66	81.56	14.65	14.33	38.32	28.16	43.3	10.2
KC4692	208.33	8.8	34.06	44.33	81.52	16.76	10.33	51.71	35.38	53.6	11.0
KC4638	211.66	10.96	33.96	46.33	79.72	16.52	16.33	36.89	21.43	48.6	12.7
LSD (1%)	1.52	0.84	6.13	3.022	5.39	1.64	1.59	3.50	2.25	5.7	1.1

**Suppl Table 1** (Continued)

Genotype	MA	GY	TGW	GH	HW	Glu	ZSV	Fe <sup>+2</sup>	Zn <sup>+2</sup>	SDS	Gpc
KC4834	205.33	10.23	35.86	42.66	78.64	16.03	15.66	64.06	30.46	56.6	14.03
KC4806	209.33	10.13	37.63	46	78.65	17.77	15	62.41	25.78	53.3	12.4
KC4602	203.33	10.46	43	44	79.81	16.17	10.66	62.36	34.29	57.6	12.3
KC4576	202.33	11.16	49	46.33	79.14	16.7	16	38.65	26.53	48.6	10.7
KC4681	210	9.66	37.46	46.66	80.26	12.07	15	41.51	30.9	47.0	10.2
KC4607	202.33	11.1	37.66	47	79.08	18.71	14.33	61.88	25.16	52.3	12.1
Navid	204.66	6.16	29.76	46.66	72.47	11.38	18	38.92	26.69	47.2	12.7
Tajan	207.66	6.66	38	52.33	74.58	16.43	17	41.75	28.45	63.0	15.1
Niknejad	207.33	6.83	35.3	46.33	75.59	14.1	15.33	42.04	26.71	64.6	13.6
Alvand	208.66	7.06	41.3	53.66	71.04	11.92	19.66	54.94	13.08	52.6	12.2
Falat	207	6.06	36.3	53.66	68.65	13.12	20.33	40.61	29.05	47.3	11.9
Moghan3	206.33	6.13	38.16	47.33	73.98	16.49	20	47.05	25.67	57.3	14.6
Shirudi	206.33	6.8	42.7	49.66	73.33	14.23	19.66	52.66	26.38	55.3	14.3
Zarin	208.33	6.53	32.36	51.66	72.63	16.41	19.33	51.4	27.66	49.0	12.3
Azar 2	206.66	8.06	36.36	47.66	71.36	15.49	18.66	46.1	13.61	53.3	12.7
Chamran	204.66	6.56	39.06	50.33	77.96	16.96	19	40.91	26.56	55.3	11.8
LSD (1%)	1.52	0.84	6.13	3.02	5.39	1.64	1.591	3.50	2.25	5.7	1.1

Fe<sup>+2</sup>: grain iron (mg kg<sup>-1</sup> dry weight), MA: day to maturity, Gpc: grain protein content (%), GY: grain yield (g per plant), TGW: thousand grain weight (g), GH: grain hardness (g mm<sup>-2</sup>), HW: hectoliter weight (kg), Glu: dry gluten (%), SDS: sodium dodecyl sedimentation volume (ml); Zn<sup>+2</sup>: grain zinc content (mg kg<sup>-1</sup> dry weight), ZSV: zeleny sedimentation volume (ml), Differences larger than LSD values are significant