

Table S1 Two-way ANOVA results of measured traits of wheat genotypes Kharchia 65 (K-65), B.T. Schomburgk (BTS), HD2687 and HD3298 grown under hydroponics in control or salt stress conditions (C: control, 5dSm⁻¹, 10dSm⁻¹ and 15dSm⁻¹). CT (Canopy temperature, °C), AD (Average diameter of root, µm), R Na⁺ (Root Na⁺ content, %), L Na⁺ (Leaf Na⁺, %), L Na⁺/K⁺ (Leaf Na⁺/K⁺, %), R Na⁺/K⁺ (Root Na⁺/K⁺, %), WD (Water deficit, %), TSRW_LB (Total specific root weight length basis), TSRW_SA (Total specific root weight surface area basis), STD (Stomatal density), RFW (Root fresh weight, g), CCM (Chlorophyll Content meter (Chlorophyll content index), RDW (Root dry weight, g), TFW (Total fresh weight, g), TDW (Total dry weight, g), SDW (Shoot dry weight, g), SFW (Shoot fresh weight, g), MSI (Membrane stability index, %), PH (Plant height, cm), RL (Root length, cm), SL (Shoot length, cm), R_K⁺ (Root K⁺ content, %), RWC (Relative water content, %), TRL (Total root length), TIPS (Total root tips), FORKS (Total root forks), TPA (Total projected area), TSA (Total surface area), TRV (Total root volume), L_K⁺ (Leaf K⁺ content), TSRL (Total specific root length), TSRSA (Total specific root surface area). . *, ** and *** indicate 5%, 1% and 0.1% levels of significance, respectively.

Trait: PH						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	10710.3	3570.1	4705.837	< 2.2e-16	***
Genotype	3	285.1	95	125.2715	< 2.2e-16	***
Treatment : Genotype	9	234.7	26.1	34.3695	2.12E-13	***

Response: AD						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	0.065425	0.021809	18.7162	4.94E-07	***
Genotype	3	0.028555	0.009518	8.1687	0.000401	***
Treatment : Genotype	9	0.029906	0.003323	2.8517	0.014866	*

Response: APX_ROOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	4592313	1530771	1.7868	0.1709	
Genotype	3	3113001	1037667	1.2112	0.3226	
Treatment : Genotype	9	11052941	1228105	1.4335	0.2183	

Response: APX_SHOOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	2.09E+08	69670748	10.318	7.91E-05	***
Genotype	3	40996695	13665565	2.0238	0.1317	
Treatment : Genotype	9	85431473	9492386	1.4058	0.2297	

Response: CAT_ROOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	2054.2	684.7	14.579	3.70E-06	***
Genotype	3	16579.3	5526.4	117.667	< 2.2e-16	***
Treatment : Genotype	9	16110.5	1790.1	38.113	1.31E-14	***

Response: CAT_SHOOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	101128194	33709398	81.734	1.55E-14	***
Genotype	3	18396114	6132038	14.8681	4.11E-06	***
Treatment : Genotype	9	21127697	2347522	5.692	0.0001343	***

Response: CCI						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	0.224	0.07465	0.3955	0.757127	
Genotype	3	2.8156	0.93854	4.9728	0.006418	**
Treatment : Genotype	9	0.8502	0.09447	0.5005	0.862278	

Response: CT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	20.513	6.8377	29.7524	1.09E-13	***
Genotype	3	49.19	16.3965	71.3447	< 2.2e-16	***
Treatment : Genotype	9	5.125	0.5695	2.4779	0.01374	*

Response: DAB_LEAF						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	2003.5	667.84	12.4473	1.85E-05	***
Genotype	3	1641.4	547.12	10.1973	8.63E-05	***
Treatment : Genotype	9	3618.8	402.09	7.4942	1.17E-05	***

Response: DAB_ROOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	413.8	137.93	0.5681	0.64035	
Genotype	3	1997.7	665.89	2.7424	0.06052	.
Treatment : Genotype	9	2038.4	226.48	0.9328	0.51175	

Response: FORKS						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	3.35E+08	1.12E+08	22.2503	8.88E-08	***
Genotype	3	8462081	2820694	0.5613	0.64474	
Treatment : Genotype	9	89773874	9974875	1.9848	0.077108	.

Response: GR_ROOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	65.47	21.8233	5.605	0.003567	**
Genotype	3	87.839	29.2797	7.52	0.000679	***
Treatment : Genotype	9	167.539	18.6154	4.7811	0.000536	***

Response: GR_SHOOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	174421	58140	39.2161	1.67E-10	***
Genotype	3	143303	47768	32.2196	1.64E-09	***
Treatment : Genotype	9	84499	9389	6.3328	5.41E-05	***

Response: Leaf K ⁺						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	0.112898	0.037633	1461.005	< 2.2e-16	***
Genotype	3	0.25216	0.084053	3263.178	< 2.2e-16	***
Treatment : Genotype	9	0.003181	0.000353	13.7226	2.08E-08	***

Response: Leaf Na ⁺						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	1.58771	0.52924	9752.283	<2e-16	***
Genotype	3	0.56085	0.18695	3444.95	<2e-16	***
Treatment : Genotype	9	0.24996	0.02777	511.7916	<2e-16	***

Response: Leaf Na ⁺ /K ⁺						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	231.71	77.237	12350.7814	<2e-16	***
Genotype	3	192.011	64.004	10234.7482	<2e-16	***
Treatment : Genotype	9	158.129	17.57	2809.5667	<2e-16	***

Response: TBARS ROOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	0.002393	0.000798	55.4685	2.38E-12	***
Genotype	3	0.001189	0.000396	27.5565	9.30E-09	***
Treatment : Genotype	9	0.000967	0.000107	7.4741	1.20E-05	***

Response: TBARS SHOOT						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	0.37109	0.123696	90.9427	3.71E-15	***
Genotype	3	0.13409	0.044696	32.8611	1.31E-09	***
Treatment : Genotype	9	0.10523	0.011692	8.596	3.12E-06	***

Response: MSI						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	333.6	111.2	418.0185	< 2.2e-16	***
Genotype	3	56.68	18.894	71.0259	9.89E-14	***
Treatment : Genotype	9	240.61	26.735	100.4996	< 2.2e-16	***

Response: NBT leaf						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	6143.9	2047.96	9.2395	0.000175	***
Genotype	3	406.6	135.54	0.6115	0.612812	
Treatment : Genotype	9	8397	933	4.2092	0.001354	**

Response: NBT root						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	2071.5	690.49	4.0795	0.015258	*
Genotype	3	1848.6	616.21	3.6407	0.023726	*
Treatment : Genotype	9	7319.4	813.27	4.8049	0.000516	***

Response: Root K ⁺						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	0.9858	0.3286	1906.2755	<2e-16	***
Genotype	3	0.1781	0.05937	344.4023	<2e-16	***
Treatment : Genotype	9	0.19239	0.02138	124.0099	<2e-16	***

Response: Root Na ⁺						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	4.1801	1.39336	11156.92	<2e-16	***
Genotype	3	1.1221	0.37402	2994.832	<2e-16	***
Treatment : Genotype	9	0.625	0.06944	556.0408	<2e-16	***

Response: Root Na ⁺ /K ⁺						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	86.197	28.7322	6499.056	<2e-16	***
Genotype	3	27.469	9.1562	2071.092	<2e-16	***
Treatment : Genotype	9	38.954	4.3282	979.0155	<2e-16	***

Response: RDW						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	0.009548	0.003183	71.6807	8.77E-14	***
Genotype	3	0.002899	0.000966	21.7611	1.11E-07	***
Treatment : Genotype	9	0.004004	0.000445	10.021	6.53E-07	***

Response: RFW						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	1.32274	0.44091	120.5641	< 2.2e-16	***
Genotype	3	0.7686	0.2562	70.0562	1.18E-13	***
Treatment : Genotype	9	0.93352	0.10372	28.3625	2.70E-12	***

Response: RL						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	3398.9	1132.95	2131.656	< 2.2e-16	***
Genotype	3	150.7	50.24	94.5324	2.20E-15	***
Treatment : Genotype	9	193.6	21.51	40.4728	2.34E-14	***

Response: RWC						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	407.49	135.829	3.7325	0.02161	*
Genotype	3	77.24	25.748	0.7075	0.55508	
Treatment : Genotype	9	458.7	50.966	1.4005	0.23188	

Response: SDW						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	0.89262	0.29754	146.2462	< 2.2e-16	***
Genotype	3	0.26105	0.087016	42.7699	5.93E-11	***
Treatment : Genotype	9	0.11262	0.012513	6.1503	6.97E-05	***

Response: SFW						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	22.7476	7.5825	579.2888	< 2.2e-16	***
Genotype	3	3.7548	1.2516	95.619	1.88E-15	***
Treatment : Genotype	9	1.0631	0.1181	9.0245	1.92E-06	***

Response: SL						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	1837.72	612.57	1035.059	< 2.2e-16	***
Genotype	3	382.97	127.66	215.703	< 2.2e-16	***
Treatment : Genotype	9	115.61	12.85	21.7042	8.37E-11	***

Response: SOD root						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	3.6124	1.20412	54.8828	2.72E-12	***
Genotype	3	0.3153	0.10511	4.7907	0.00763	**
Treatment : Genotype	9	1.1311	0.12568	5.7285	0.000127	***

Response: SOD shoot						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	261.465	87.155	231.1737	< 2.2e-16	***
Genotype	3	10.265	3.422	9.0759	0.000198	***
Treatment : Genotype	9	19.34	2.149	5.7	0.000133	***

Response: SPR root						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	14.79	4.9298	14.927	3.97E-06	***
Genotype	3	8.678	2.8926	8.7584	0.000253	***
Treatment : Genotype	9	35.056	3.8951	11.7939	1.14E-07	***

Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	6138.5	2046.18	45.337	2.92E-11	***
Genotype	3	305.5	101.83	2.2563	0.102178	
Treatment : Genotype	9	1461.6	162.4	3.5983	0.003851	**

Response: TRL						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	5617373	1872458	35.2776	5.79E-10	***
Genotype	3	59063	19688	0.3709	0.774532	
Treatment : Genotype	9	966155	107351	2.0225	0.071725	.

Response: TRV						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	4.4095	1.46984	47.693	1.57E-11	***
Genotype	3	0.6398	0.21328	6.9204	0.00112	**
Treatment : Genotype	9	1.6249	0.18055	5.8584	0.000106	***

Response: TSA						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	60585	20195	45.3369	2.92E-11	***
Genotype	3	3015	1005	2.2563	0.102178	
Treatment : Genotype	9	14425	1602.8	3.5983	0.003851	**

Response: TSRL						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	8.42E+08	2.81E+08	12.5576	1.72E-05	***
Genotype	3	1.16E+08	38817409	1.7371	0.180571	
Treatment : Genotype	9	8.09E+08	89903964	4.0232	0.001851	**

Response: TSRSA						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	9261856	3087285	12.0799	2.35E-05	***
Genotype	3	2702722	900907	3.5251	0.026699	*
Treatment : Genotype	9	11506097	1278455	5.0023	0.000379	***

Response: TSRW_LB						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	4.46E-14	1.49E-14	15.5627	2.74E-06	***
Genotype	3	1.45E-14	4.84E-15	5.0733	0.005838	**
Treatment : Genotype	9	3.99E-14	4.43E-15	4.6398	0.000671	***

Response: TSRW_SAB						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	2.42E-12	8.06E-13	15.5509	2.76E-06	***
Genotype	3	1.60E-12	5.32E-13	10.2681	8.20E-05	***
Treatment : Genotype	9	2.63E-12	2.92E-13	5.6352	0.000146	***

Response: WD						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment	3	407.49	135.829	3.7325	0.02161	*
Genotype	3	77.24	25.748	0.7075	0.55508	
Treatment : Genotype	9	458.7	50.966	1.4005	0.23188	

Response:						
Particulars	Df	Sum Sq	Mean Sq	F value	Pr(>F)	Significance
Treatment						
Genotype						
Treatment : Genotype						