

M. Shehzad et al. «**IDENTIFICATION OF QTLS ON CHROMOSOME 1B FOR GRAIN QUALITY TRAITS IN BREAD WHEAT (*TRITICUM AESTIVUM* L.)**» <http://cytgen.com/articles/5020013s.pdf>

Table S1. The list of genotypes selected for association mapping

S. NO	NAMES OF GENOTYPES	S. NO	NAMES OF GENOTYPES
1	T11	48	CHENAB-2000
2	T14	49	FAISALABAD 85
3	T16	50	IQBAL2000
4	T17	51	KOHISTAN 97
5	T18	52	KOHSAR 95
6	T19	53	LYP 73
7	T20	54	MANTHAR
8	T21	55	NAEEM 82
9	T22	56	PARI 73
10	T23	57	PASINA 90
11	T24	58	PUNJAB 76
12	T25	59	SH-2002
13	8A	60	V-87094(WATAN)
14	C-245	61	NACUZARI 76
15	C-247	62	OASIS
16	C-248	63	PBW 450
17	C-250	64	FRET-1
18	C-258	65	FRET-2
19	C-269	66	WH542
20	C-271	67	SAAR
21	C-273	68	KARIEGA
22	GA-2002	69	BOBWHITE'S'
23	LASANI-08	70	BYRSA-87
24	SEHER-06	71	CHAM-4
25	YECORA	72	HARTOG
26	FAISALABAD-08	73	TRAP#1
27	CHAKWAL-86	74	PBW 343*2/KONK
28	INQLAB-91	75	PVN//CAR422/ANA/3/KAUZ*2/TRAP//KAUZ
29	PARWAZ-94	76	CAR 422/ANA//TRAP#1/3/KAUZ*2/TRAP//KAUZ
30	SHAFaq-06	77	KAKATSI
31	AARI-10	78	PVN/PBW65/3/KAUZ*2/TRAP//KAUZ
32	BHAKKAR-2000	79	PRL'S'/PVN
33	CHAKWAL-50	80	V-03007
34	FAREED-6	81	PFAU/WEAVER
35	MIRAJ-08	82	SA 75
36	BHITTAI	83	ZAMINDAR 80
37	JAUHAR-78	84	V-03BT007
38	KIRAN-95	85	NL 750
39	KHIRMAN	86	NEELKANT'S'
40	MARVI-2000	87	KINGBIRD
41	ANMOLE-91	88	QUIU
42	SASSI	89	HD2169/BOW S

43	SIND-81	90	V-04179 PB96/V87094//MH97 PBP28624-31A-19K-6A-5A-4A-7A-0A
44	AARI-10	91	V-05066 AMSEL/ATTLA//INQ.91/PEW'S'
45	ZARGOON 79	92	V-07102 LUAN/KOH-97//PAK-81
46	ZARDANA 89	93	V-8210 KRITATI/2*WBLLI CGSS02B00131T-099B-099Y-099M-099Y-099M-19WGY-0B

Table S2. The SSR markers used to detect population structure

SN o	Marker Name	Nucleotide Sequence	Chromosomal location (cM)	PCR Profile	References
1	GWM99	5'AAGATGGACGTATGCATCACA 3' 5' GCCATATTTGATGACGCATA 3'	1A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
2	GWM135	5'TGTCAACATCGTTTTGAAAAGG 3' 5' ACACTGTCAACCTGGCAATG 3'	1A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997); Roder MS <i>et al.</i> (1998)
3	GWM136	5'GACAGCACCTTGCCCTTTG 3' 5'CATCGGCAACATGCTCATC 3	1A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
4	GWM164	5'ACATTTCTCCCCATCGTC 3' 5'TTGTAACAAATCGCATGCG 3'	1A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997); Roder MS <i>et al.</i> (1998)
5	GWM124	5'GCCATGGCTATCACCCAG3' 5'ACTGTTTCGGTGCAATTTGAG3'	1B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
6	GWM140	5'ATGGAGATATTTGGCCTACAAC 3' 5' CTTGACTTCAAGGCGTGACA 3'	1B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
7	GWM153	5'GATCTCGTCACCCGGAATTC 3' 5'TGGTAGAGAAGGACGGAGAG3 ,	1B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
8	GWM106	5' CTGTTCTTGCGTGGCATTAA3' 5' AATAAGGACACAATTGGGATGG 3'	1A/1B/1D	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997); Roder MS <i>et al.</i> (1998)
9	GWM47.2	5' TTGCTACCATGCATGACCAT 3' 5' TTCACCTCGATTGAGGTCT 3'	2A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
10	GWM55	5' GCATCTGGTACACTAGCTGCC3' 5' TCATGGATGCATCACATCCT3'	2B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
11	GWM102	5'TCTCCCATCCAACGCCTC 3' 5'TGT TGG TGG CTT GAC TAT TG 3'	2D	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
12	GWM55.2	5' GGTTGCAGTTTCCACCTTGT 3' 5' CATCTATTGCCAAAATCGCA 3'	2B/2D	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)

13	GWM67	5' ACCACACAAACAAGGTAAGCG 3' 5' CAACCCTCTTAATTTTGTGGG 3'	3A/5B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998); Somers <i>et al.</i> (2004)
14	GWM133	5' ATCTAAACAAGACGGCGGTG' 3' ATCTGTGACAACCGGTGAGA3'	3A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
15	GWM77	5' ACAAAGGTAAGCAGCACCTG 3' 5' ACCCTCTTGCCCGTGTTG 3'	3B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
16	GWM107	5' ATTAATACCTGAGGGAGGTGC 3' 5'GGTCTCAGGAGCAAGAACAC3'	3B/4B/6B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
17	GWM156	5'CCAACCGTGCTATTAGTCATTC 3' CAATGCAGGCCCTCCTAAC 3'	3B/5A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
18	GWM161	5' GATCGAGTGATGGCAGATGG 3' 5' TGTGAATTACTIONTGGACGTGG 3'	3D	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997); Roder MS <i>et al.</i> (1998)
19	GWM162	5'AGTGGATCGACAAGGCTCTG 3' 5'AGAAGAAGCAAAGCCTTCCC 3'	3A/4A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
20	GWM44	5' GTTGAAGCTTTTCAGTTCGGC 3' 5' ACTGGCATCCACTGAGCTG 3'	4A/7D-78	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
21	GWM149	5'CATTGTTTTCTGCCTCTAGCC3' 5'CTAGCATCGAACCTGAACAAG 3'	4B/4D	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997); Roder MS <i>et al.</i> (1998)
22	GWM165	5'TGCAGTGGTCAGATGTTTTCC 3' 5'CTTTTCTTTCAGATTGCGCC 3'	4A/4B/4D	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997); Roder MS <i>et al.</i> (1998); Somers DJ <i>et al.</i> (2004)
23	GWM68	5' AGGCCAGAATCTGGGAATG 3' 5' CTCCCTAGATGGGAGAAGGG 3'	5B/7B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997); Roder MS <i>et al.</i> (1998); Somers DJ <i>et al.</i> (2004)
24	GWM70	5' AGTGGCTGGGAGAGTGTCAT 3' 5' GCCCATTACCGAGGACAC 3'	6B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
25	GWM121	5'CGAAGGATTTGTGATGTGAGT A3' 5'GGACAACATCATAGAGAAGGA	5D/7D	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)

		A3'			
26	GWM130	5'AGCTCTGCTTCACGAGGAAG3' 5'CTCCTCTTTATATCGCGTCCC3'	2B/7A/7B	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997); Roder MS <i>et al.</i> (1998)
27	GWM200	5' TCAACGGAACAGATGAGCG 3' 5' GACCTGATGAGAGCAAGCAC 3'	6A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Korzun V <i>et al.</i> (1997)
28	GWM205	5' CGACCCGGTTCACCTCAG 3' 5' AGTCGCCGTTGTATAGTGCC 3'	5A	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
29	BARC174	5'TGGCATT TTTCTAGCACCAATA CAT 3' 5'GCGAACTGGACCAGCCTTCTAT CTGTTC 3'	7A	94°C/5min;35(94°C/30s; 52°C/30; 72°C/45s); 72°C /10min	Somers <i>et al.</i> (2004)
30	WMC749	5'GGGTACAGGAGGATCTGACAG G3' 5'TCTCGTCTCCGTCTAGGTTTCG3'	6D	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Somers <i>et al.</i> (2004)

Table S3. The SSR markers on 1B used for LD and Marker trait associations

S.No	Marker Name	Nucleotide Sequence	Chromosomal location (cM)	PCR Profile	References
1	Xpsp3000	5'GCAGACCTGTGTCATTGGT C3' 5'GATATAGTGGCAGCAGGAT ACG3'	0	94°C/3min;35(94°C/30s; 55°C/30; 72°C/45s); 72°C /10min	Bryan GJ <i>et al.</i> (1997); Stephenson P <i>et al.</i> (1998)
2	GWM608	5'ACATTGTGTGTGCGGCC3' 5' GATCCCTCTCCGCTAGAAG C3'	12	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
3	GWM550	5'CCACAAGAACCTTTGAAGA 3' 5'CATTGTGTGTGCAAGGCAC 3'	14	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
4	WMC818	5' TGAAGGGTGCGTGTGGTC 3' 5' GCGTCGATTTTAATTTGATGA TGG 3'	17	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
5	GWM374.	5'ATAGTGTGTTGCATGCTGTG	18	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s);	Roder MS <i>et al.</i> (1998)

	1	TG 3' 5'TCTAATTAGCGTTGGCTGCC 3'		72°C /10min	
6	WMC798	5'GTGTGGTAGTGTAGCTGCC AAAAG3' GTTAGCATGGCACATAGAAG CAG 3'	19	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
7	WMC51	5'TTATCTTGGTGTCTCATGTC AG3' 5'TCGCAAGATCATCAGAACA GTA 3'	20	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
8	WMC619	5'TTCCCTTTCCCTCTTTCCG 3' 5'TACAATCGCCACGAGCACC T 3'	21	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
9	BARC60	5' CATGCTCACAAAACCCACAA GACT 3' 5' CTCGAAAGGCGGCACCACTA 3'	23	95°C/3min;35(94°C/40s; 55°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
10	WMC406	5' TATGAGGGTCGGATCAATAC AA 3' 5' CGAGTTTACTGCAAACAAAT GG 3'	24	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
11	BARC8	5'GCGGGAATCATGCATAGGA AAACAGAA3' 5'GCGGGGGCGAAACATACAC ATAAAAACA 3'	25	95°C/3min;35(94°C/40s; 55°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
12	GWM413	5' TGCTTGTCTAGATTGCTTGGG 3' 5' GATCGTCTCGTCCTTGGCA 3'	26	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
13	GDM36	5'ATGCAAAGGAATGGATTCA A3' 5'CAAATCCGCATCCAGAAAA T3'	27	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Somers <i>et al.</i> (2004)

14	GWM33	5' GGAGTCACACTTGTTTGTGCA 3' 5'CACTGCACACCTAACTACCT GC 3'	28	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder <i>et al.</i> (1998); Somers <i>et al.</i> (2004)
15	WMC128	5'CGGACAGCTACTGCTCTCCT TA 3' 5'CTGTTGCTTGCTCTGCACCC TT 3'	30	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
16	GDM28	5'ATCTGACTTCATGGTTTATA T3' 5'TCAAGAATGAAGACATAGT T3'	30	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
17	GWM 131	5'AATCCCCACCGATTCTTCTC 3' 5'AGTTCGTGGGTCTCTGATG G3'	31	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998); Paillard S <i>et al.</i> (2003); Somers <i>et al.</i> (2004)
18	WMC419	5' GTTTCGGATAAAACCGGAGT GC3' 5' ACTACTTGTGGGTTATCACCA GCC3'	32	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
19	WMC269	5' GCACCTTCTAACCTTCCCCAG C3' 5' CCCTAATCCAGGACTCCCTCA G3'	33	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
20	BARC137	5' GGCCATTTCCTCACTTTCCA 3' 5' CCAGCCCCTCTACACATTTT 3'	34	95°C/3min;35(94°C/40s; 55°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
21	WMC626	5'AGCCATAAACATCCAACA CGG3' 5' AGGTGGGCTTGGTTACGCTCT	35	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)

		C 3'			
22	WMC213	5' ATTTTCTCAAACACACCCCG 3' 5' TAGCAGATGTTGACAATGGA 3'	36	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Somers <i>et al.</i> (2004)
23	WMC694	5' ATTTGCCCTTGTGAGCCGTT 3' 5' GACCTGGGTGGGACCCATTA 3'	37	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Somers <i>et al.</i> (2004)
24	BARC181	5' CGCTGGAGGGGGTAAGTCAT CAC 3' 5'CGCAAATCAAGAACACGGG AGAAAGAA 3'	38	95°C/3min;35(94°C/40s; 55°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
25	CFA2129	5'GTTGCACGACCTACAAAGC A3' 5'ATCGCTCACTCACTATCGG G3'	39	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Sourdille P <i>et al.</i> (2001)
26	CFD48	5'ATGGTTGATGGTGGGTGTT T3' 5'ATGTATCGATGAAGGGCCA A 3'	40	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Guyomarc'h H <i>et al.</i> (2002)
27	GDM101	5' GTCTCCATGACAAGGAGGGA 3' 5' TGAAACCTCAAAGGGAAAGA 3'	42	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Somers <i>et al.</i> (2004)
28	WMC416	5'AGCCCTTTCTACCGTGTTC TT3' 5'TATGGTCGATGGACTGTCC CTA3'	44	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
29	WMC134	5'CCAAGCTGTCTGACTGCCA	47	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min);	Somers <i>et al.</i> (2004)

		TAG3' 5'AGTATAGACCTCTGGCTCA CGG3'		72°C /10min	
30	GWM403	5'CGACATTGGCTTCGGTG' 5'ATAAACAGTGCGGTCCAG G3'	50	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder <i>et al.</i> (1998); Somers <i>et al.</i> (2004)
31	WMC206	5'TTGTGCTCGTGAATTGCAT ACC 3' 5'GCCAAAATGGCAGCTTCTC TTA3'	60	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
32	GWM153	5'GATCTCGTCACCCGGAATT C3' 5'TGGTAGAGAAGGACGGAG AG3'	61	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder <i>et al.</i> (1998)
33	BARC81	5'GCGCTAGTGACCAAGTTGT TATATGA' 5'GCGGTTTCGGAAGTGCTAT TCTACAGTAA3'	62	95°C/3min;35(94°C/40s; 55°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
34	WMC631	5'TTGCTCGCCACCTTCTACC 3' 5'GGAAACCATGCGCTTCACA C3'	63	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
35	gwm124	5'GCCATGGCTATCACCCAG3' 5'ACTGTTTCGGTGCAATTTGA G3'	64	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)
36	CFA2147.1	5'TCATCCCCTACATAACCCG A3' 5'ATCGTGCACCAAGCAATAC A3'	75	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Somers <i>et al.</i> (2004)
37	WMC44	5'GGTCTTCTGGGCTTTGATCC	92	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)

		TG 3' 5'TGTTGCTAGGGACCCGTAG TGG3'			
38	WMC367	5'CTGACGTTGATGGGCCACT ATT 3' 5'GTGGTGGGAAGAGGAAGGA GAGG 3'	103	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers and Isaac (2004)
39	BARC80	5'GCGAATTAGCATCTGCATC TGTTTGAG 3' 5' CGGTCAACCAACTACTGCA CAAC 3'	106	95°C/3min;35(94°C/40s; 55°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
40	GWM259	5'AGGGAAAAGACATCTTTTT TTTC 3' 5'CGACCGACTTCGGGTTC 3'	107	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998); Paillard S <i>et al.</i> (2003); Somers <i>et al.</i> (2004)
41	WMC728	5'GCAGGCTCTGCATCTTCTTG 3' 5'CGCAGAGCTGAGCTGAAAT C 3'	110	94°C/5min;35(94°C/40s; 61°C/40; 72°C/1min); 72°C /10min	Somers <i>et al.</i> (2004)
42	gwm140	5'ATGGAGATATTTGGCCTAC AAC 3' 5' CTTGACTTCAAGGCGTGACA 3'	111	94°C/5min;35(94°C/30s; 60°C/30; 72°C/45s); 72°C /10min	Roder MS <i>et al.</i> (1998)

Table S4: Analysis of variance for yield and quality related traits

	df	Protein (%)	Moisture (%)	Starch (%)	Gluten (%)	1000 grain wt. (kg/hL.)	Test wt. (g)	Bread quality	Chapati quality	Seed length	Seed width	Seed thickness	Grain hardness	Flour pH	Yield (t/ha)
Corrected	238	0.914	0.21	1.618	10.00	321.92	3.539	14.27	1.222	0.167	0.04	0.06	5.92	0.07 ^s	93.4
Intercept	1	34186.9725266.9	576137.	115062.	290582.	1096495	1014809	2704.504	7790.72	1888.885	1454.607	877168	7565.013	253	
Year	1	0.02 ^{ns}	0.162*	1.11*	0.04 ^{ns}	2487.63	0.04 ^{ns}	0.12*	0.18*	0.12*	0.07 ^{ns}	0.01 ^{ns}	0.20*	0.01 ^{ns}	3.43
Genotype	91	1.742*	0.386 ^{ns}	2.61**	19.384*	314.22*	6.05**	21.86**	2.48**	0.31**	0.07*	0.123*	11.59**	0.027 ^{ns}	212
Block	5	1.00*	0.128 ^{ns}	4.86**	36.16**	2.22**	6.36**	70.47**	3.93**	0.12 ^{ns}	0.04 ^{ns}	0.05 ^{ns}	3.30 ^{ns}	0.04 ^{ns}	2.42
Year x	90	0.06 ^{ns}	0.05 ^{ns}	0.57 ^{ns}	0.81 ^{ns}	275.36*	0.59 ^{ns}	0.45 ^{ns}	0.02 ^{ns}	0.06 ^{ns}	0.02 ^{ns}	0.02 ^{ns}	0.76 ^{ns}	0.01 ^{ns}	94.3
Year x block	5	0.15 ^{ns}	0.04 ^{ns}	0.50 ^{ns}	0.99 ^{ns}	2.18*	0.30 ^{ns}	0.01 ^{ns}	0.11 ^{ns}	0.08 ^{ns}	0.01 ^{ns}	0.02 ^{ns}	0.3 ^{ns}	0.01 ^{ns}	1.67
Genotype x	45	0.54*	0.20 ^{ns}	1.73*	0.71 ^{ns}	5.18**	4.33**	18.08**	1.28*	0.07 ^{ns}	0.03 ^{ns}	0.02 ^{ns}	5.44**	0.02 ^{ns}	5.65
Error	45	0.093	0.054	0.494	1.082	4.657	0.951	0.001	0.061	0.063	0.021	0.016	0.809	0.003	0.97
Total	284														
Corrected total	283														

** Indicates highly significant results ($P < 0.01$); * Indicates significant results ($P < 0.05$); ^{ns} indicates non-significance