

## Supplementary data

**Identification of QTLs for four physiological traits in an advanced backcross population of wheat under drought stress**

Mohamed N. Barakat\*, A. A. Al-Doss, K A. Moustafa, A. A. Elshafei, A. K. Salem

Supplementary Table 1: Analysis of variance for four physiological traits of the 75 BC<sub>2</sub>F<sub>2</sub> families derived from Veery X Yecora Rojo population.

S. O. V	D. F	Chlorophyll content	Flag leaf senescence	Cell membrane stability	ABA content
Reps	2	0.45	0.004	0.023	0.0012
Water treatment (W)	1	1152.2**	2557.4**	2.16**	18.90**
Ea	2	2.61	2.1	0.01	0.0012
Wheat genotypes (G)	76	18.1**	46.7**	0.031**	0.0783**
W* G	76	4.1**	14.82**	0.01**	0.0591**
Eb	304	0.868	0.005	0.002	0.00121

\*\*Significant at 0.01 probability level.

Supplementary Table 2: The available TRAP primer pairs.

Primer name	Nucleotide sequence (5'→ 3')	
TRAP 2	F: TGAGTCCAAACCGGTAG	R: CGGACAGTGGCGGAGTTA
TRAP 3	F: TGAGTCCAAACCGGTAG	R: GGCGAACTCCGACATCTT
TRAP 4	F: TGAGTCCAAACCGGTAG	R: GAGGAAGACGACGAGGAGT
TRAP 5	F: TGAGTCCAAACCGGTAG	R: CAGGCAAGACGCAAGGTG
TRAP 15	F: TGAGTCCAAACCGGTCC	R: CCCTCCACCAATCACAAT
TRAP 63	F: TGAGTCCAAACCGGAAG	R: TTCTTCCTCCCGCTCATCCT
TRAP 74	F: TGAGTCCAAACCGGAGC	R: CGGACAGTGGCGGAGTTA
TRAP 76	F: TGAGTCCAAACCGGAGC	R: GAGGAAGACGACGAGGAGT
TRAP 84	F: TGAGTCCAAACCGGAAT	R: GGCGAACTCCGACATCTT
TRAP 85	F: TGAGTCCAAACCGGAAT	R: GAGGAAGACGACGAGGAGT
TRAP 105	F: TGAGTCCAAACCGGTGT	R: CAGGCAAGACGCAAGGTG

Supplementary Table 3: The available SRAP primer pairs

Primer name	Nucleotide sequence (5'→ 3')	
SRAP 17	F: TGAGTCCAAACCGGTAG	R: GACTGCGTACGAATTCCA
SRAP 22	F: TGAGTCCAAACCGGTCC	R: GACTGCGTACGAATTGTC
SRAP 83	F: TGAGTCCAAACCGGTGC	R: GACTGCGTACGAATTAAT
SRAP 85	F: TGAGTCCAAACCGGTGC	R: GACTGCGTACGAATTCAG
SRAP 86	F: TGAGTCCAAACCGGTGC	R: GACTGCGTACGAATTTGA
SRAP 91	F: TGAGTCCAAACCGGTGC	R: GACTGCGTACGAATTGAC
SRAP 93	F: TGAGTCCAAACCGGTGC	R: GACTGCGTACGAATTAGC
SRAP 94	F: TGAGTCCAAACCGGTGC	R: GACTGCGTACGAATTTGC
SRAP 97	F: TGAGTCCAAACCGGTGC	R: GACTGCGTACGAATTCCA
SRAP 113	F: TGAGTCCAAACCGGACC	R: GACTGCGTACGAATTAGC
SRAP 135	F: TGAGTCCAAACCGGAAG	R: GACTGCGTACGAATTAGG
SRAP 173	F: TGAGTCCAAACCGGAGC	R: GACTGCGTACGAATTAGC

Supplementary Table 4: The available SSR primer pairs

Primer name	Nucleotide sequence (5'→3')	
Barc22	GCG ACA TCC GAT TTC TAC AAC A	CAC GCA TAC ACG AAC ACG CAT CTG
Barc32	GCGTGAATCCGGAAACCCAATCTGTG	TGGAGAACCTTCGCATTGTGTCATTA
Barc45	CCCAGATGCAATGAAACCACAAT '	GCGTAGAACTGAAGCGTAAAATTA
Barc52	GCGCCATCCATCAACCGTCATCGTCATA	GCGAGGAAGGCGGCCACCAGAATGA
Barc54	GCGAACAGGAGGACAGAGGGCACGAGAG	GCGCTTTCCCACGTTCCATGTTTCT
Barc71	GCGCTTGTTTCCTCACCTGCTCATA	GCGTATATTCTCTCGTCTTCTTGTGGTT
Barc76	ATTCGTTGCTGCCACTTGCTG '	GCGCGACACGGAGTAAGGACACC
Barc80	GCGAATTAGCATCTGCATCTGTTTGAG	CGGTCAACCAACTACTGCACAAC
Barc87	GCTCACCGGGCATTGGGATCA '	GCGATGACGAGATAAAGGTGGAGAAC
Barc126	CCATTGAAACCGGATTTGAGTCG	CGTTCATCCGAAATCAGCAC
Barc133	AGCGCTCGAAAAGTCAG	GGCAGGTCCAACCTCCAG
Barc137	GGCCATTTCCCACTTTCCA	CCAGCCCCTCTACACATTTT
Barc156	CGC ATC GAG GTC TTC CCC GCT GTC CAA	CGC ACC CAC ACA TGT ATC TGA GTT TCC TA
Barc181	CGCTGGAGGGGGTAAGTCATCAC	CGCAAATCAAGAACACGGGAGAAAGAA