

Table S4 - Details of selected candidate genes identified in the wheat cultivar MGS1 Aliança under drought stress.

Tissue	Expression	Gene	Isotig	TAIR locus* ¹	Class
Root	up	DHN1	isotigs 21944, 19917 and 22422	UNIPROTKB A8CVF3	Dehydrin
Leaf	down	DHN1	isotigs 12334 and 12047	UNIPROTKB A8CVF3	Dehydrin
Root	down	ERD9	isotigs 18701, 19352, 09429 and 18313	TAIR locus:2012773 - "AT1G10370"	GST* ²
Leaf	up	ERD9	isotigs 02218 and 02219	TAIR locus:2012773 - "AT1G10370"	GST
Root	down	GGT1	isotigs 07897 and 07898	TAIR locus:2135212 - "AT4G39640"	GST
Root	up and down	ATGSTF13	isotigs 04717, 04718, 04719, 04720, 14807, 14782, 18016, 09789 and 09790	TAIR locus:2081695 - "AT3G62760"	GST
Root	up	GSH1	isotigs 04750 and 04751	TAIR locus:2127173 - "AT4G23100"	GST
Root	down	GSTU18	isotig 09430	TAIR locus:2012758 - "AT1G10360"	GST
Root	up and down	ATGSTF13	isotigs 04117, 04118, 04119, 04120, 14782, 18016, 09789 and 09790	TAIR locus:2081695 - "AT3G62760"	GST
Root	down	GSTU25	isotig 16756	TAIR locus:2020312 - "AT1G17180"	GST
Root	down	AT1G65820	isotig 21972	TAIR locus:2018566 - "AT1G65820"	GST
Root	up	OXP1	isotigs 06621 and 06622	TAIR locus:2156030 - "AT5G37830"	GST
Root	up	GSTL3	isotig 16495	TAIR locus:2151326	GST
Leaf	up	GSTL3	isotig 07806	TAIR locus:2151326	GST
Leaf	up	GR1	isotigs 00610, 00611, 00612, 00613, 00614 and 00615	TAIR locus:2093691	GST
Leaf	up	AtLEA4-1	isotigs 04918 and 04919	TAIR locus:2206629 - "AT1G32560"	Late embryogenesis abundant
Root	up	AtLEA4-1	isotigs 22882 and 21093	TAIR locus:2206629 - "AT1G32560"	Late embryogenesis abundant
Root	up	LEA14	isotigs 08385, 08386 and 20485	TAIR locus:2025346 - "AT1G01470"	Late embryogenesis abundant
Leaf	up	LEA14	isotigs 09631, 1144 and 11608	TAIR locus:2025346 - "AT1G01470"	Late embryogenesis abundant
Leaf	up and down	LEA7	isotigs 01765, 01766, 01767 and 00921	TAIR locus:2035109 - "AT1G52690"	Late embryogenesis abundant
Root	up	LEA7	isotigs 02966, 02968, 05172, 05173 and 05174	TAIR locus:2035109 - "AT1G52690"	Late embryogenesis abundant
Leaf	up	LEA	isotig 11058	TAIR locus:2050095 - "AT2G21490"	Late embryogenesis abundant
Leaf	up	LEA4-5	isotig 13697	TAIR locus:2170239 - "AT5G06760"	Late embryogenesis abundant
Root	up	AT2G46140	isotigs 29594 and 21457	TAIR locus:2062933 - "AT2G46140"	Late embryogenesis abundant
Root	down	ACC1	isotig 00996	TAIR locus:2034310 - "AT1G36160"	Late embryogenesis abundant
Root	up	P5CS1	isotigs 11387 and 11306	TAIR locus:2063907 - "AT2G39800"	Proline biosynthesis
Leaf	up	P5CS1	isotigs 01879, 01880, 018881, 02920 and 02921	TAIR locus:2063907 - "AT2G39800"	Proline biosynthesis
Leaf	up	P5CS2	isotig 14186	TAIR locus:2078911	Proline biosynthesis
Leaf	up	ALDH12A1	isotig 04753	TAIR locus:2154094 - "AT5G62530"	Proline biosynthesis
Root	up	DELTA-OAT	isotig 11923	TAIR locus:2161398 - "AT5G46180"	Proline biosynthesis
Leaf	up	DELTA-OAT	isotigs 01704, 01705, 01706 and 01707	TAIR locus:2161398 - "AT5G46180"	Proline biosynthesis
Leaf	down	RCA	isotigs 02002, 02004, 02003, isoitg00923, 00924 and 00925	TAIR locus:2063922 - "AT2G39730"	Leaf senescence
Root	down	SAG12	isotigs 04483, 04485, 12184, 08512, 14879, 14986 and 15605	TAIR locus:2152445 - "AT5G45890"	Leaf senescence
Root	up	SAG29	isotigs 12741, 07441 and 07442	TAIR locus:2179867	Leaf senescence
Root	up	LTI65	isotigs 05862 and 05863	TAIR locus:2156652 - "AT5G52300"	Leaf senescence
Leaf	up	LTI65	isotig 06036	TAIR locus:2156652 - "AT5G52300"	Leaf senescence
Leaf	up	HAI1	isotig 03931	TAIR locus:2168449 - "AT5G59220"	Leaf senescence
Root	down	ARF1	isotigs 06705 and 06706	TAIR locus:2025991 - "AT1G59750"	Leaf senescence
Root	down	WRKY70	isotig 14342	TAIR locus:2102539 - "AT3G56400"	Leaf senescence
Root	down	OPR1	isotig 15278	TAIR locus:2030086 - "AT1G76680"	Leaf senescence
Leaf	up	NCED3	isotigs 03234 and 03235	TAIR locus:2091652 - "AT3G14440"	Abscisic acid biosynthetic process
Root	down	AAO3	isotigs 00384, 00385, 00386 and 00387	TAIR locus:2045149 - "AT2G27150"	Abscisic acid biosynthetic process
Root and leaf	up	OST1	isotig 03858	TAIR locus:2118929 - "AT4G33950"	Response to abscisic acid stimulus

*¹ TAIR locus means region corresponding to a single transcription unit in the Arabidopsis genome.

*² GST means glutathione S-transferase and others related to glutathione biosynthesis and catabolism.