

## Supplementary Materials

**Table S1.** Analysis of variance (ANOVA) for yield parameters of durum wheat genotypes grown under two moisture regimes.

Source of variation	No. DF	Yield and yield related traits													
		PH (cm)		SL (cm)		NGPS		NEPP		BYPP (g)		GYPP (g)		HI (%)	
		F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F
Moisture regimes (MR)	1	867.63	<0.0001	139.06	<0.0001	215.16	<0.0001	0.32	0.5734	127.50	<0.0001	52.27	<0.0001	0.65	0.4320
Genotypes (G)	14	6.23	<0.0001	0.95	0.5062	3.39	<0.0001	1.11	0.3540	6.00	<0.0001	2.80	0.0010	0.92	0.5355
MR × G	14	2.57	0.0025	1.55	0.0996	2.89	0.0007	1.03	0.4317	1.44	0.1414	3.41	<0.0001	0.96	0.4979

**Note:** No. DF, number of degree of freedom; SL, Spike Length; NGPS, Number of Grains per Spike; NEPP, Number of Ears per Pot; BYPP, Biomass Yield per Pot in Grams; GYPP, Grain Yield per Pot in grams, and HI, Harvest Index. All the random variables were excluded from the table summary.

**Table S2.** Analysis of variance (ANOVA) for measured morphological traits in tested durum wheat genotypes under control and drought stress conditions.

Source of variation	No. DF	Morphological traits							
		TLAPP (cm <sup>2</sup> )		SLA (cm <sup>2</sup> g <sup>-1</sup> )		LAR (cm <sup>2</sup> g <sup>-1</sup> )		SN_Sq.root	
		F-value	Pr>F	F-value	Pr>F	F-value	Pr>F	F-value	Pr>F
Moisture regimes (MR)	1	12.98	0.0004	1.84	0.1768	2.94	0.0882	11.17	0.0022
Genotypes (G)	14	1.58	0.0894	1.22	0.2661	1.27	0.2312	1.26	0.2889
MR × G	14	1.16	0.3101	1.12	0.3449	1.20	0.2783	0.45	0.9420

**Note:** TLAPP, Total Leaf Area per Plant; SLA, Specific Leaf Area; LAR, Leaf Area Ratio, and SN\_Sq.root, Stomata Number, square root transformed value.

**Table S3.** Stress tolerance indices were computed using the following formula.

Index name	Outcome	Formula	Reference
Tolerance Index(TOL)	The genotypes with low values of this index are more stable in two different conditions.	$Tol=Y_{pi}-Y_{si}$	(Rosielle and Hamblin, 1981)
Mean Productivity Index (MPI)	The genotypes with high value of this index are more desirable.	$MPI = \frac{Y_{si}+Y_{pi}}{2}$	(Rosielle and Hamblin, 1981)
Harmonic Mean (HM)	The genotypes with high value of this index are more desirable.	$HM = \frac{2(Y_{pi} \times Y_{si})}{Y_{pi}+Y_{si}}$	(Schneider <i>et al.</i> , 1997 )
Geometric Mean Productivity (GMP)	The genotypes with high value of this index are more desirable.	$GMP = \sqrt{Y_{pi} \times Y_{si}}$	(Fernandez, 1992)
Stress Susceptibility Index (SSI)	The genotypes with $SSI < 1$ are more resistant to stress.	$SSI = \frac{1 - \frac{Y_{si}}{Y_{pi}}}{1 - \frac{Y_s}{Y_p}}$	(Fisher and Maurer, 1978)
Stress Tolerance Index (STI)	The genotypes with high STI values are tolerant to stress.	$STI = \frac{Y_{si} \times Y_{pi}}{Y_p^2}$	(Fernandez, 1992)
Yield Stability Index (YSI)	The genotypes with high YSI values can be regarded as stable genotypes under stress and non-stress conditions.	$YSI = \frac{Y_{si}}{Y_{pi}}$	(Bousslama and Schapaugh, 198)
Yield Index (YI)	The genotypes with high value of this index are suitable for stress condition.	$YI = \frac{Y_{si}}{Y_s}$	(Gavuzzi <i>et al.</i> , 1997)

$Y_{pi}$  = the potential mean yield of each genotype in the well-watered condition,  $Y_{si}$  = the mean yield of each genotype in drought stress condition,  $Y_s$  = the mean yield of all genotypes in drought stress condition and  $Y_p$  = the potential mean yield of all genotypes in well-watered conditions.