

**Article title: Mapping of QTLs associated with yield and yield related traits in durum wheat (*Triticum durum* Desf.) under irrigated and drought conditions**  
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**Table S1** Correlations among Gr, Hd and Ph under various conditions and seasons, \*: correlation significant at *p value* 0.05 and \*\*: correlation significant at *p value* 0.01

	Gr_S1	GrD_S1	Gr_S2	GrD_S2	Hd_S1	HdD_S1	Hd_S2	HdD_S2	Ph_S1	PhD_S1	Ph_S2	PhD_S2
Gr_S1	1											
GrD_S1	0.63**	1										
Gr_S2			1									
GrD_S2		0.21**	0.44	1								
TT_S1												
TT_S2												
Hd_S1	0.23**	0.21**			1							
HdD_S1					0.94**	1						
Hd_S2		0.21**			0.8**	0.78**	1					
HdD_S2			0.21*		0.73**	0.78**	0.9**	1				
Ph_S1		-0.3**			-0.23**			-0.21**	1			
PhD_S1	-0.21**	-0.19*		0.24*					0.8**	1		
Ph_S2		-0.19*						-0.2*	0.73**	0.68**	1	
PhD_S2									0.71**	0.65**	0.89**	1

**Table S2** Correlations among Tr, Sc, Phr and Wue under various conditions and seasons, \*: correlation significant at *p value* 0.05 and \*\*: correlation significant at *p value* 0.01

	Tr_S1	TrD_S1	Tr_S2	TrD_S2	Sc_S1	ScD_S1	Sc_S2	ScD_S2	Phr_S1	PhrD_S1	Phr_S2	PhrD_S2	Wue_S1	WueD_S1	Wue_S2	WueD_S2
Tr_S1	1															
TrD_S1	0.21**	1														
Tr_S2	0.54**	-	1													
TrD_S2			0.25**	1												
Sc_S1	0.5**		0.27**		1											
ScD_S1	0.2*	0.85**	0.39**			1										
Sc_S2				-	0.28**	0.38**	1									
ScD_S2		0.54**	0.39**		-	0.21**	0.66**	0.47**	1							
Phr_S1					0.84**		0.35**		1							
PhrD_S1						0.36**		0.26**		1						
Phr_S2	-	0.23**	0.25**	0.53**	0.38**		0.33**	0.79**	0.61**	0.28**	0.21**	1				
PhrD_S2		0.48**	0.44**	-0.4**		0.61**	0.5**	0.96**		0.3**	0.68**	1				
Wue_S1	-	0.29**		-	0.52**	0.21**	0.56**		0.27**		0.5**		1			
WueD_S1		-	0.75**					-	0.27**		0.65**		-0.21**	1		
Wue_S2	-	0.37**	0.3**	0.75**	0.37**		0.37**	0.52**	0.57**		0.93**	0.65**	0.53**		1	
WueD_S2		0.39**	0.44**	-	0.58**		0.54**	0.5**	0.86**		0.33**	0.69**	0.97**		0.67**	1

**Table S3** Correlations among SI, Sw, Sps and Tkw under various conditions and seasons, \*: correlation significant at *p value* 0.05 and \*\*: correlation significant at *p value* 0.01

	SI_S1	SID_S1	SI_S2	SID_S2	Sw_S1	SwD_S1	Sw_S2	SwD_S2	Sps_S1	SpsD_S1	Sps_S2	SpsD_S2	Tkw_S1	TkwD_S1	Tkw_S2	TkwD_S2
SI_S1	1															
SID_S1	0.47**	1														
SI_S2		0.3**	1													
SID_S2		0.26**	0.67**	1												
Sw_S1	0.25**				1											
SwD_S1	0.27**	0.33**			0.6**	1										
Sw_S2	0.27**		0.25**				1									
SwD_S2				0.22**		0.27**	0.57**	1								
Sps_S1					0.68**	0.57**			1							
SpsD_S1	0.29**	0.3**			0.54**	0.9**		0.28**	0.63**	1						
Sps_S2							0.57**	0.37**			1					
SpsD_S2				0.23**			0.34**	0.74**			0.36**	1				
Tkw_S1				- 0.22**	0.36**	0.25**	0.22**	0.29**	0.26**				1			
TkwD_S1				0.21**	0.26**	0.3**	0.23**	0.31**	0.22**				0.8**	1		
Tkw_S2				- 0.22**	0.25**	0.25**	0.58**	0.66**	0.24**		0.2*	0.29**	0.41	0.36**	1	
TkwD_S2					0.21**	0.23**	0.53**	0.73**	0.26**		0.31**	0.43**	0.47**	0.9**	1	

**Table S4** Correlations among Bm, Yd and HI under various conditions and seasons, \*: correlation significant at *p value* 0.05 and \*\*: correlation significant at *p value* 0.01

	Bm_S1	BmD_S1	Bm_S2	BmD_S2	Yd_S1	YdD_S1	Yd_S2	YdD_S2	HI_S1	HID_S1	HI_S2	HID_S2
Bm_S1	1											
BmD_S1	0.44**	1										
Bm_S2	0.58**		1									
BmD_S2		0.22**	0.32**	1								
Yd_S1	0.63**	0.3**	0.33**		1							
YdD_S1	0.29**	0.69**			0.49**	1						
Yd_S2	0.43**		0.74**	0.32**	0.63**		1					
YdD_S2		0.32**	0.25**	0.74**	0.3**	0.5**	0.44**	1				
HI_S1	-0.2*		-0.28**		0.5**	0.35**			1			
HID_S1	-0.24**	-0.38**	-0.2*			0.34**		0.22*	0.4**	1		
HI_S2					0.46**		0.5**	0.32**	0.64**	0.44**	1	
HID_S2				-0.3**	0.24**	0.49**		0.37**	0.21**	0.44**	0.3**	1

**Table S5** Correlations among STI, MP, STI, SSI and DRI in two seasons, \*: correlation significant at *p value* 0.05 and \*\*: correlation significant at *p value* 0.01

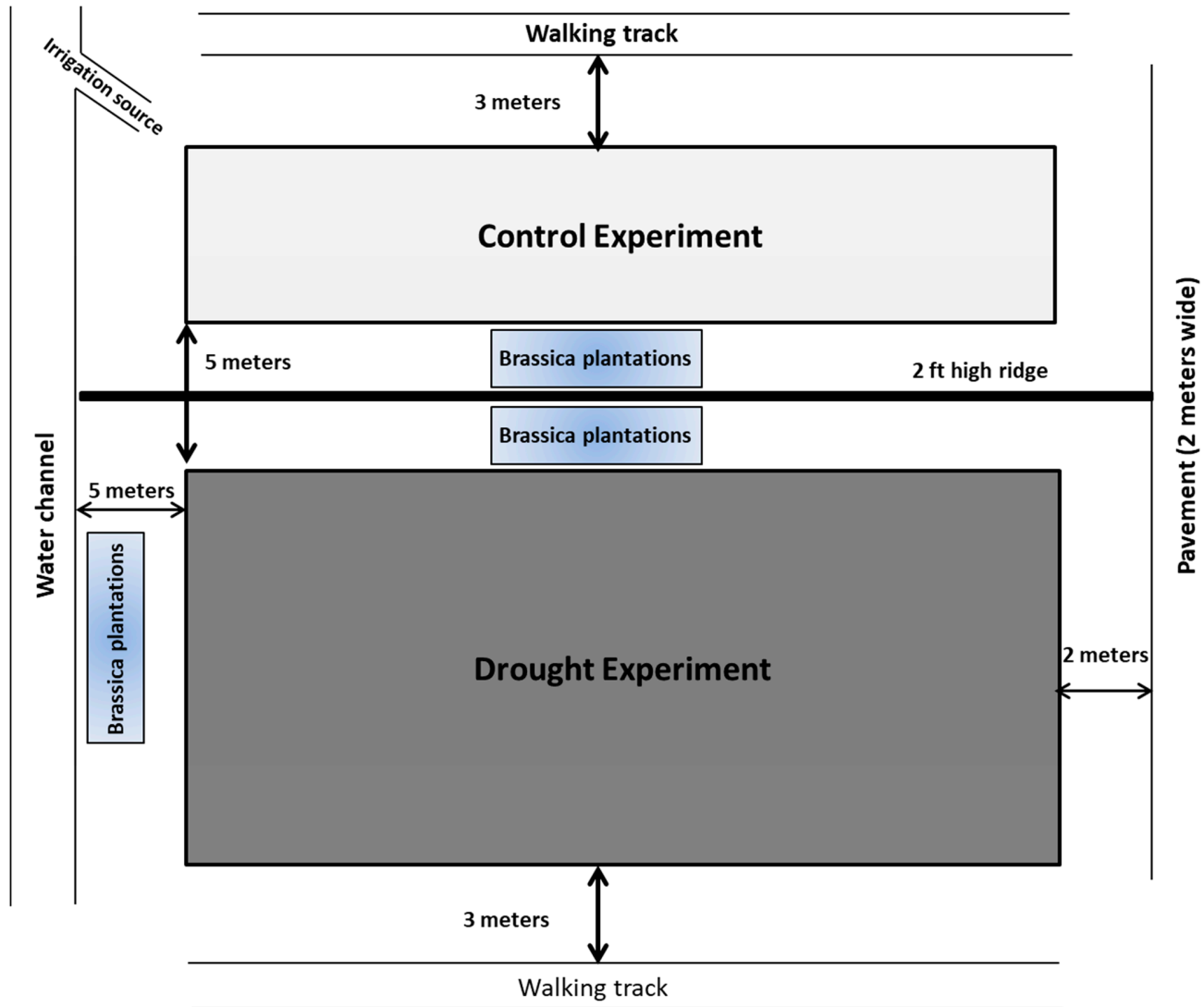
	STI_S1	STI_S2	MP_S1	MP_S2	ST_S1	ST_S2	SSI_S1	SSI_S2	DRI_S1	DRI_S2
STI_S1	1									
STI_S2	0.55**	1								
MP_S1	0.95**	0.56**	1							
MP_S2	0.51**	0.91**	0.59**	1						
ST_S1	0.67**	0.5**	0.87**	0.63**	1					
ST_S2	0.31**	0.54**	0.49**	0.83**	0.68**	1				
SSI_S1	0.2*	0.31**	0.45*	0.54**	0.8**	0.75**	1			
SSI_S2			0.26*	0.34**	0.54**	0.78**	0.76**	1		
DRI_S1	0.31**			-0.21*	-0.4**	-0.49**	-0.81**	-0.63**	1	
DRI_S2	0.27*	0.55**		0.26**		-0.32**	-0.39**	-0.77**	0.48**	1

**Table S6** Rainfall data of the two seasons of the study

	2016-17 (S1)		2017-18 (S2)	
	Amount in mm	Days	Amount in mm	Days
<b>Nov</b>	0	0	0.44	0
<b>Dec</b>	0	0	0.06	0
<b>Jan</b>	11.14	5	0	0
<b>Feb</b>	1.22	1	7.25	3
<b>March</b>	4.71	2	10.56	7
<b>April</b>	16.58	4	12.21	15
<b>May</b>	2.6	2	11.96	5
<b>Total</b>	36.25	14	42.48	30

**Table S7** Temperature data of the two seasons of the study in °C

	2016-17 (S1)			2017-18 (S2)		
	Min.	Max.	Mean	Min.	Max.	Mean
Nov	16	31	22	17	19	22
Dec	12	27	18	13	24	17
Jan	9	21	13	10	25	15
Feb	11	27	18	13	26	18
March	14	31	22	17	32	24
April	23	39	31	23	36	29
May	29	42	36	30	41	36
<b>Mean</b>	16.28	31.14	22.85	17.57	29	23



**Fig S1** Layout of the experiments in S1 and S2