



Figure S1. Banding pattern of the sex markers that showed high significant association with grain yield under water shortage stress. Lan 1: 100bp ladder; lane 2: M.J56 allele; lanes 3,4,5,6 Egyptian parents; Lanes 7:24 are the newly developed lines allele.

Table S1. Name and loci of markers co-localized with previously reported qDTY.

Marker	Chromosome No.	Locus		QTL	References
		cM*	Kb**		
RM9	1	92.4	23322208	qDTY1.1	[1,2]
RM543	1	145.6	32776801	qDTY1.2	[3]
RM302	1	147.8	32981599		
RM212	1	148.7	33047896		
RM11943	1		37846103	qDTY1.4	[3]
RM431	1	178.3	38888469		
RM3549	2		11388913	qDTY2.1	[4] [5]
RM555	2	59.8		qDTY2.2	[3] [5]
RM263	2	127.5	25889828		
RM525	2	143.7	28292005		
RM166	2	183	.		
RM3894	3	3.9	10977	qDTY3.1	[4]
RM14551	3		5402086	5402086	
RM3199	3	137.6	30221208	qDTY3.2	[3]
RM416	3	191.6			
RM566	9	47.7	14651176	qDTY9.1	[3,5]
RM24390	9		15942569		
RM7424	9	60.8	16527147		
RM410	9	64.4	17588741		
RM257	9	66.1	17666088		
RM242	9	73.3	18642201		
RM28048	12	45.2***	14153465	qDTY12.1	[6]
RM28099	12		15896826		
RM511	12	55.5***	17442508		
RM277	12	57.2			
RM1261	12	57.5***	17578154		
RM28166	12		17654663		
RM260	12	61.7			

*Locus according to (www.gramene.org; accessed on 28 November 2020); ** Locus according to [7]; *** Locus according to [6].

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