

Table 1 Suppl. Field performance of Omrabi5 × Belikh2 RILs. RILs were cultivated in an unreplicated design with five standard cultivars at the ICARDA experimental station in Breda, Syria in two growing seasons. Average annual rainfall was 280 mm. Standard deviation (SD), minimum (Min) and maximum (Max) values of RILs are shown. Least significant differences were estimated from the analysis of variance. TKM - thousand kernel mass.

Season	Trait	Omrabi5	Belikh2	RILs mean	SD	Min	Max	LSD 5 %
2008/09	time to heading [d]	91.83	97.50	96.80	4.17	91.00	111.00	1.28
	time to maturity [d]	134.00	139.08	140.11	4.32	136.00	156.00	3.21
	plant height [cm]	78.00	65.64	73.91	12.41	52.83	100.33	3.56
	grain yield [kg m ⁻²]	4.56	2.75	3.33	0.89	1.09	5.67	0.50
	straw yield [kg m ⁻²]	8.21	7.79	7.60	2.12	2.39	13.49	1.52
	total yield [kg m ⁻²]	12.77	10.54	10.93	2.86	3.48	18.43	1.88
	harvest index [%]	0.36	0.26	0.31	0.04	0.20	0.39	0.03
	TKM [g]	52.61	39.89	43.67	6.31	31.75	60.78	5.90
2009/10	time to heading [d]	122.25	130.67	128.89	5.58	120.00	145.00	1.66
	time to maturity [d]	163.83	177.08	177.09	8.03	163.00	202.00	3.75
	plant height [cm]	68.22	58.67	66.39	12.22	40.80	92.70	4.91
	grain yield [kg m ⁻²]	3.13	1.35	1.78	0.51	0.95	3.68	0.51
	straw yield [kg m ⁻²]	6.57	4.83	4.83	1.48	2.99	10.05	1.14
	total yield [kg m ⁻²]	9.69	6.18	6.61	1.85	4.30	11.89	1.55
	harvest index [%]	0.32	0.22	0.27	0.04	0.14	0.49	0.04
	TKM [g]	44.58	27.59	37.39	5.35	25.75	56.25	3.45

Table 2. Suppl. The QTL analysis of agronomic traits detected in the Omrabi5 × Belikh2 RIL population. QTL declared when LOD exceeded 3. Positive additive effects indicate a contribution by Omrabi5. Chr - chromosome, R² - proportion of the phenotypic variance explained, TKM - thousand kernel mass.

Trait	Season	Chr	Marker interval (flanking markers)	Positions [cM]	LOD	LOD threshold	R ² [%]	Additive effects
Time to heading	2008/09	2A	WMC177	40.70	3.68	3.0	11.86	1.53
	2008/09	2B	barc183-GWM148	18.70	3.77	3.0	8.82	-1.30
	2009/10	2B	barc183-GWM148	18.70	5.25	3.1	13.62	-2.07
Time to maturity	2008/09	5A	GWM1236-barc197	131.30	3.13	2.9	8.62	-1.29
	2008/09	7A	WMC405-GWM1065	72.50	4.99	2.9	11.19	-1.83
	2009/10	2A	GWM726-WMC177	40.70	4.32	3.0	13.15	2.70
	2009/10	5B	barc59-GWM790	251.70	4.94	3.0	13.15	-2.99
Plant height	2008/09	4B	barc193-GWM925	9.90	27.45	3.6	64.62	10.21
	2009/10	4B	barc193-GWM925	9.90	21.36	3.1	56.44	9.16
Grain yield	2008/09	1B	GWM1100-barc8	25.00	3.45	3.1	10.70	152.86
	2008/09	2B	GWM47	107.80	3.42	3.1	11.16	153.63
	2009/10	3A	GWM674-WMC388	113.90	4.03	3.0	13.59	96.03
	2009/10	4A	barc327-GWM855	9.60	6.01	3.0	18.17	104.30
Straw yield	2009/10	7B	WMC426	99.80	3.48	3.0	11.79	87.04
	2008/09	4B	WMC617-barc193	9.90	3.68	3.1	10.88	389.98
	2009/10	3A	GWM779-barc45	38.50	6.77	3.0	22.27	312.97
	2009/10	5A	GWM865	342.00	3.24	3.0	9.11	205.97
Total yield	2009/10	1A	GWM497b	0.00	3.35	3.0	9.05	-251.09
	2009/10	3A	GWM779-barc45	52.10	5.45	3.0	17.30	342.68
Harvest index	2008/09	2B	GWM148	26.20	3.49	3.0	11.00	1.32
	2009/10	5B	barc4	18.90	3.02	3.0	10.00	1.53
TKM	2008/09	2A	barc309-GWM425	86.60	3.11	3.0	10.03	-1.91