

TableS5 Results of the QTL detection in the flint design using the LDLA – 2 cM model. For each detected QTL, we showed its genetic position on the flint consensus map, its confidence interval, its level of significance and the partial percentage of variance explained. We also showed the name of one of the markers located at the detected position and their range of physical position(s) on the B73 v2 genome (Gore et al. 2009).

Trait	Nb	Chr	Marker	Physical position (kb)	Genetic position (cM)	-log10(p)	R ² (%)
DMC (%)	1	1	PZE_101146598	189773	118	6.2	2.5
	2	2	PZE_102185359	229130 - 229288	165	5	1.7
	3	4	PZE_104018885	18916 - 23142	50.3	6.9	3.4
	4	5	PZE_105085637	107137 - 138073	80.4	9.1	4.6
	5	5	PZE_105163718	208374	149.2	4.5	1.9
	6	8	PZE_108063241	113068 - 113206	64.1	6.5	3.2
	7	10	PZE_110049849	93025 - 115573	46	46.5	20.8
	8	10	PZE_110089009	139036	69.9	5	1.4
DMY (dt.ha ⁻¹)	1	1	PZE_101146427	189406	118.5	14.9	5.3
	2	2	PZE_102172077	215135	144.9	6.9	2.5
	3	3	PZE_103097999	157939	65.4	6	1.9
	4	3	PZE_103142979	198520 - 198581	101.6	4.7	2.5
	5	4	PZE_104023433	26403 - 26403	52.7	15.8	5.8
	6	4	PZE_104122410	199546 - 199546	126.5	5.4	2.6
	7	5	PZE_105092759	133339 - 159961	84.4	7.4	3.7
	8	6	PZE_106050624	100745 - 103709	35.4	4.6	2.2
	9	6	PZE_106103665	155178	90.5	7.8	3.4
	10	7	PZE_107128846	170819	128.9	9	2.9
	11	8	PZE_108027746	26074 - 29164	49.5	6.7	3.4
	12	10	PZE_110047350	88553 - 97551	44.6	31.7	13.4
DtSILK (d)	1	1	PZE_101005818	4452	10.3	5.6	1.4
	2	1	PZE_101147104	190602	119.4	33.6	9.2
	3	1	PZE_101199859	248854 - 249092	173.9	14.2	4.1
	4	2	PZE_102181292	222435 - 223721	156.5	6.3	1.6
	5	3	PZE_103118006	176570	78.5	10.9	3
	6	3	PZE_103167997	216529	126.6	9.2	1.9
	7	4	PZE_104044892	42641 - 134020	62.5	29.6	8.8
	8	5	PZE_105039522	24542	63.6	18	5.4
	9	8	PZE_108133033	173617	133.8	9.2	2.1
	10	9	PZE_109010021	11134	30.1	11.9	2.9
	11	10	PZE_110060375	114622 - 114653	48.6	89.7	29.6
DtTAS(d)	1	1	PZE_101005770	4610	10.5	5.3	1.5
	2	1	PZE_101109004	116312 - 158005	105.3	16	4.7
	3	1	PZE_101147248	190703	121.1	6.4	1.7
	4	1	PZE_101213479	263702 - 265655	186.8	8.9	2.3

5	3	PZE_103109418	170117 - 171781	75.9	9.3	2.1	
6	3	PZE_103157683	209726	116.3	8	2.1	
7	4	PZE_104044703	33362 - 96313	60.7	24	7.2	
8	5	PZE_105063310	62822 - 82069	76	24	7.1	
9	6	PZE_106064975	117082 - 122646	56.3	6.9	2.2	
10	7	PZE_107128144	170420 - 170496	126.6	6.1	1.4	
11	8	PZE_108019174	18351	42.8	6.8	1.9	
12	8	PZE_108073574	128549 - 128753	75.2	16.7	4.5	
13	9	PZE_109009220	10008 - 10009	28.4	11.2	2.5	
14	10	PZE_110049001	89438 - 108230	47.2	61.8	18.8	
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PH (cm)	1	1	PZE_101144184	187342 - 187381	118.6	14.2	4.6
	2	2	PZE_102076936	51554 - 59013	83	9.1	3.7
	3	2	PZE_102175167	217650	147.7	8	2.7
	4	4	PZE_104028514	34558 - 80248	60.2	11.3	4.8
	5	4	PZE_104104676	180887	105.6	6.2	1.5
	6	5	PZE_105144284	198198	130.3	7.5	1.9
	7	7	PZE_107057864	111123 - 112763	55.4	6	2.2
	8	7	PZE_107128144	170420 - 170496	126.6	9.7	2.8
	9	8	PZE_108092331	149305 - 155644	87.8	18.3	6.6
	10	9	PZE_109008133	8741	25.8	5.2	1.5
	11	10	PZE_110049849	93025 - 115573	46	56	21.3