

Table S4 Results of the QTL detection in the flint design using the LDLA – 5 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_101147104	190602	119.4	7.3	2.9
	2	1	PZE_101250881	295590	225.9	5.6	2.2
	3	2	PZE_102025627	11947	39.2	7	1.8
	4	2	PZE_102046822	24366	63.7	7.3	3.4
	5	2	PZE_102183284	225854	157.9	8	3
	6	4	PZE_104021283	22836	54.9	11.2	4.8
	7	5	PZE_105085637	107137 - 138073	80.4	10.2	4.3
	8	5	PZE_105165365	208891 - 209048	148.7	5.2	1.6
	9	6	PZE_106076029	131411 - 134098	64.2	4.9	2.3
	10	8	PZE_108018911	18447	43.1	7.5	2.9
	11	10	PZE_110049849	93025 - 115573	46	70.2	29.2
DMY (dt.ha ⁻¹)	1	1	PZE_101147651	191513	118.9	13.3	5.7
	2	1	PZE_101213494	263732	185.2	5.7	2.6
	3	3	PZE_103098382	158668 - 159808	66.8	7.9	4.1
	4	4	PZE_104020618	21905	55	13.5	6.3
	5	4	PZE_104123129	200190	129.8	5.3	2.9
	6	5	PZE_105068572	71700 - 72614	75.9	6.9	3.7
	7	6	PZE_106107736	156986	95.6	4.3	1.2
	8	7	PZE_107128866	170819	127.8	10	3.5
	9	8	PZE_108029326	27221 - 66473	50.1	6.6	3.4
	10	10	PZE_110045930	86778 - 109582	46.3	31.3	14.3
DtSILK (d)	1	1	PZE_101005818	4452	10.3	5.2	1.2
	2	1	PZE_101146834	190143	119.1	34.3	8.1
	3	1	PZE_101199192	248322	171.8	15	3.9
	4	2	PZE_102179704	222468	154.6	10.1	2.4
	5	3	PZE_103098382	158668 - 159808	66.8	8.2	2.4
	6	3	PZE_103121610	69965 - 179545	79.5	7.8	2
	7	4	PZE_104062511	44504 - 124929	62.6	31.7	8.1
	8	5	PZE_105078445	86146 - 140781	80.7	18.6	4.7
	9	5	PZE_105153835	204326 - 205504	137.6	10.9	2.4
	10	7	PZE_107133704	173181	139.3	7.6	1.6
	11	8	PZE_108066557	118189	68.7	7.4	1.9
	12	8	PZE_108133033	173617	133.8	6.6	1.1
	13	9	PZE_109009936	11079	31.6	11.6	2.8

	14	10	PZE_110048157	90243 - 122268	48.7	98.7	29.1
DtTAS (d)	1	1	PZE_101005765	4609	10	6.5	1.8
	1	1	PZE_101109004	116312 - 158005	105.3	7.3	2.5
	2	1	PZE_101147104	190602	119.4	6.9	2.2
	3	1	PZE_101213102	263154	185.3	9	2.7
	4	3	PZE_103098655	158895	67.4	8.9	2.7
	5	3	PZE_103158635	210426	116.9	7.7	2.2
	6	4	PZE_104044703	33362 - 96313	60.7	21.6	6.8
	7	5	PZE_105066936	69125 - 83278	77.8	21.9	6.5
	8	7	PZE_107136925	174718	144.3	5.7	1.3
	9	8	PZE_108019174	18351	42.8	6.8	2
	10	8	PZE_108073574	128549 - 128753	75.2	13.4	3.9
	11	9	PZE_109009220	10008 - 10009	28.4	9.5	2.4
	12	10	PZE_110048157	90243 - 122268	48.7	58.1	18.3
	13	1	PZE_101005765	4609	10	6.5	1.8
PH (cm)	1	1	PZE_101146427	189406	118.5	14.7	5.2
	2	2	PZE_102074552	39031 - 55241	78	9.3	3.8
	3	2	PZE_102173058	216192	146.8	7.4	2.9
	4	4	PZE_104045760	68246 - 68323	58.7	10.6	4.4
	5	4	PZE_104103602	179801 - 180054	102.8	6.6	2.4
	6	5	PZE_105150122	201632	128.7	8.7	2.7
	7	7	PZE_107128144	170420 - 170496	126.6	11.2	3.2
	8	8	PZE_108092331	149305 - 155644	87.8	20.5	7.8
	9	9	PZE_109008703	9311	25.5	4.8	1.3
	10	10	PZE_110049849	93025 - 115573	46	56.8	21.7