

**Table S3 Results of the QTL detection in the flint design using the connected 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)	Confidence interval	-log10(p)	R <sup>2</sup> (%)
DMC (%)	1	1	PZE_101172677	216581	148.3	142-149	5.4	3.2
	2	2	PZE_102191415	234096	177.2	176-181	6.6	3.6
	3	3	PZE_103033917	26445 - 138643	53.1	53-58	5.1	3
	4	4	PZE_104021549	18916 - 23142	50.3	49-55	6.7	3.7
	5	5	PZE_105085637	107137 - 138073	80.4	79-84	9.8	4.9
	6	5	PZE_105150268	201762	133	129-138	5.3	3.1
	7	8	PZE_108060399	107884 - 113068	64	50-65	7.4	4
	8	10	PZE_110049849	93025 - 115573	46	46-49	59.6	26.5
<b>DMY</b>								
(dt.ha-1)	1	1	PZE_101038989	25879 - 26917	52.5	52-54	7.4	3.8
	2	1	PZE_101147651	191513	118.9	117-120	14.4	6.4
	3	2	PZE_102152279	198891	129.6	127-141	8.5	4.2
	4	3	PZE_103137887	191279 - 196563	100.1	96-101	12.4	5.7
	5	4	PZE_104021283	22836	54.9	54-57	12.1	5.6
	6	4	PZE_104152609	237454 - 237702	153.3	127-154	4.5	2.7
	7	5	PZE_105078335	88752 - 139163	82.1	81-85	8.1	4.1
	8	6	PZE_106097864	151579	83.5	82-84	9.5	4.6
	9	7	PZE_107127708	170248	126.7	123-131	5.5	3.1
	10	8	PZE_108105216	159953	94.1	92-111	6	3.2
	11	10	PZE_110047350	88553 - 97551	44.6	44-45	34.2	14.2
DtSILK (d)	1	1	PZE_101005818	4452	10.3	9-12	6.9	2.2
	2	1	PZE_101143233	184616	113.9	101-115	26.3	6.7
	3	1	PZE_101181658	226175	153.1	148 -198	4.6	1.6
	4	2	PZE_102129781	178613 - 179981	102.1	101-162	5.4	1.8
	5	3	PZE_103121610	69965 - 179545	79.5	61-80	6.8	2.1
	6	4	PZE_104027603	23555 - 38027	55.1	52-57	31.8	8
	7	5	PZE_105033399	17477 - 18623	59.8	54-60	6.7	2.1
	8	5	PZE_105093579	135624 - 150088	84.2	80-86	7.3	2.2
	9	5	PZE_105163109	204822 - 205566	138.6	132-140	5.3	1.8
	10	6	PZE_106049962	99771	33.4	27-42	8	2.4
	11	7	PZE_107130719	171824	131.5	125-133	5.6	1.9
	12	8	PZE_108067425	119151	68.4	65-91	5.3	1.8
	13	8	PZE_108135936	175699 - 175734	139.7	117-140	6.1	2
	14	9	PZE_109009942	11080 - 11080	31.3	31-32	13	3.5

	15	10	PZE_110049100	91959 - 127347	49.7	49-50	94.6	27.5
DtTAS (d)	1	1	PZE_101005766	4609	10.8	9-13	6.8	2.5
	2	1	PZE_101108474	115220 - 161708	103	100-103	31.7	9
	3	1	PZE_101198020	246399 - 250557	173.3	164-175	6.2	2.3
	4	3	PZE_103098655	158895	67.4	67-68	9	3
	5	3	PZE_103153521	206703	114.1	110-115	8.5	2.9
	6	4	PZE_104025625	30431 - 37023	57	52-57	27.6	7.9
	7	5	PZE_105068746	71898 - 87721	78.6	78-79	21.6	6.3
	8	6	PZE_106061581	111966 - 112514	47.3	46-49	8.5	2.9
	9	7	PZE_107127708	170248	126.7	124-130	8.5	2.9
	10	8	PZE_108066752	118422 - 119082	68.3	68-69	15	4.6
	11	9	PZE_109007521	8233	23.3	23-38	7.6	2.6
	12	10	PZE_110048157	90243 - 122268	48.7	46-49	62.7	18.6
PH (cm)	1	1	PZE_101127891	162428 - 178788	108.7	108-109	12.7	5.4
	2	2	PZE_102074552	39031 - 55241	78	18-85	9	4.1
	3	2	PZE_102169535	213168	143.9	140-145	6.9	3.3
	4	4	PZE_104022475	23556 - 24765	57.2	55-60	12	5.1
	5	5	PZE_105151348	202416	134.5	132-136	6.4	3.2
	6	7	PZE_107061937	118305	58.2	53-62	4.9	2.6
	7	7	PZE_107128331	170536	128.5	121-129	7.2	3.4
	8	8	PZE_108098736	155052	87.2	87-92	17.8	7.1
	9	10	PZE_110048157	90243 - 122268	48.7	46-49	55.4	21.7