

Table S11 Results of the QTL detection in the joint analysis using the connected model. For each detected QTL, we showed its genetic position on the dent-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)	$-\log_{10}(p)$	R ² (%)
DMC (%)	1	1	PZE_101032230	19696 - 19975	41.3	8.5	2.3
	2	1	PZE_101103995	104611 - 113689	93.3	5.2	1.7
	3	1	PZE_101202934	251103 - 251159	160.4	4.5	1.6
	4	1	PZE_101247063	292581	200.4	4.3	1.5
	5	2	PZE_102012595	5556	17.2	21.4	4.5
	6	2	PZE_102178263	220854	131.3	6.9	2
	7	3	PZE_103033638	26310 - 30050	45.4	9.3	2.5
	8	3	PZE_103100449	160755	65.5	7.5	2.1
	9	4	PZE_104032843	40344 - 65470	54.6	13.8	3.3
	10	4	PZE_104143137	231732	130.7	4.4	1.6
	11	5	PZE_105025123	12581	42.6	17.6	3.8
	12	6	PZE_106005094	6514	6.3	10.1	2.6
	13	6	PZE_106082658	139918 - 142454	66	11.8	2.9
	14	7	PZE_107012564	9201	33.9	4.7	1.6
	15	8	PZE_108063387	112547 - 113298	63.4	21.7	4.5
	16	9	PZE_109010670	11079 - 11504	30.8	3.9	1.5
	17	9	PZE_109096248	141983	82.5	5.4	1.7
	18	10	PZE_110047687	89209 - 111680	47.7	68.5	12.5
DMY (dt.ha-1)	1	1	PZE_101145302	188026 - 188087	109.4	12.2	3.6
	2	1	PZE_101215394	266047	170.9	10.4	3.2
	3	2	PZE_102013856	5997 - 6049	18.5	5.2	2.1
	4	2	PZE_102066516	44332	67.4	7.2	2.6
	5	3	PZE_103010658	5853	21.6	7.6	2.6
	6	3	PZE_103098655	158895 - 161562	65.7	9.5	3.1
	7	3	PZE_103162977	213416	120.4	5.3	2.1
	8	4	PZE_104025845	28986 - 32061	51.5	13.5	3.9
	9	5	PZE_105103128	155811 - 160460	78	8.8	2.9
	10	6	PZE_106037747	81440 - 86559	18.3	9.9	3.1
	11	6	PZE_106050075	99944	34	11.4	3.4
	12	6	PZE_106106971	156749	88.4	9.2	3
	13	7	PZE_107025551	28013 - 100690	44.8	8.3	2.8
	14	7	PZE_107127637	170111 - 170248	119.3	5.9	2.3
	15	8	PZE_108060398	107884 - 111781	62.1	12.1	3.6
	16	10	PZE_110043381	82670 - 84599	43.2	38.6	8.9
DtSILK (d)	1	1	PZE_101005770	4452 - 4610	9.4	6.4	1.8

	2	1	PZE_101034085	21984 - 21992	42.7	10	2.3
	3	1	PZE_101105390	102985 - 118116	93.6	19.2	3.7
	4	1	PZE_101195591	244158 - 244596	155.9	11.2	2.5
	5	2	PZE_102161485	206123 - 207224	123	13.3	2.8
	6	3	PZE_103098655	158895 - 161562	65.7	12.7	2.7
	7	3	PZE_103128597	185274 - 187610	93.2	9.1	2.2
	8	4	PZE_104025181	29345 - 30933	51.8	22.8	4.2
	9	5	PZE_105050638	42662 - 51518	61.2	16.8	3.3
	10	6	PZE_106097991	151792	77.3	11.7	2.6
	11	7	PZE_107072354	128648 - 128709	68.9	14.8	3.1
	12	8	PZE_108061059	107884 - 109378	60.7	27.9	5
	13	9	PZE_109010476	11398	30.3	11.4	2.5
	14	9	PZE_109094832	141175	82.6	5.1	1.6
	15	10	PZE_110047800	89438 - 106051	47.4	93	15.2
DtTAS(d)	1	1	PZE_101033489	21569 - 22464	43	12.1	2.5
	2	1	PZE_101140981	182104 - 184245	105	41.4	6.6
	3	1	PZE_101216412	267537 - 267568	171.5	12.3	2.5
	4	3	PZE_103098655	158895 - 161562	65.7	30.9	5.1
	5	3	PZE_103152007	205694	109.8	11.3	2.4
	6	4	PZE_104022348	23525 - 25988	49.6	25.7	4.4
	7	5	PZE_105059330	58137 - 72409	66	29.1	4.9
	8	5	PZE_105138874	193728	108.2	7.8	1.9
	9	6	PZE_106090469	147428	71.3	6.8	1.7
	10	7	PZE_107040665	66316 - 171898	75.4	13.6	2.7
	11	7	PZE_107130789	171926	126.3	6.2	1.6
	12	8	PZE_108018453	18973	42.2	11.8	2.4
	13	8	PZE_108070788	123843	69.2	20.3	3.6
	14	9	PZE_109020361	20598 - 20829	47.7	10.7	2.3
	15	9	PZE_109089874	137784	78	10.3	2.2
	16	9	PZE_109119196	153947	120.8	6.8	1.7
	17	10	PZE_110050293	94969 - 106961	47.5	77	12
PH (cm)	1	1	PZE_101021455	12363	29.3	5.1	1.4
	2	1	PZE_101106839	111278 - 150672	93.9	20.8	3.7
	3	1	PZE_101184213	229073	145.9	13.7	2.7
	4	2	PZE_102011812	5379	17.1	5.9	1.6
	5	2	PZE_102076989	59015 - 62213	74.2	20.2	3.6
	6	2	PZE_102169349	212884	128.1	9.6	2.1
	7	3	PZE_103017768	10455	33.7	8.1	1.9
	8	3	PZE_103132826	188571 - 188925	94.8	11.8	2.5
	9	3	PZE_103175533	221582 - 221583	135.2	7.1	1.8
	10	4	PZE_104022152	23948 - 24979	49.7	13.8	2.7
	11	4	PZE_104132688	215436 - 227111	120.7	9	2

12	5	PZE_105084182	101590 - 150275	73.1	9.6	2.1
13	5	PZE_105152260	203315	120.3	7.4	1.8
14	6	PZE_106049618	98629	30.4	21.2	3.8
15	7	PZE_107072030	128141 - 128146	66.4	18	3.3
16	7	PZE_107126258	168905	115.7	10.4	2.3
17	8	PZE_108009237	9875	25.6	7.3	1.8
18	8	PZE_108056704	101776 - 102656	57	8.1	1.9
19	8	PZE_108096469	152593 - 153140	85.5	17.3	3.2
20	9	PZE_109077113	124694 - 130885	70.9	19.7	3.6
21	10	PZE_110047799	89438 - 97551	46.6	77.4	12.2
